

MAR 3 4 2003

March 27, 2003

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / February 2003

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the February 2003 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. The effluent discharge criteria were not exceeded during this time period.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

FEBRUARY 2003

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T	WEEK 1 2/4/03	WEEK 2 02/11/03	WEEK 3 02/19/03	WEEK 4 02/25/03	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A A	840086 982950	855943 874000	794442 802800	578514 800100	
VINYL CHLORIDE	5	l/в ц	1.1	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	2	l/g n	1.1	BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	l/g n	1.1	BDL	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	2	l/6 n	1.0	BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	2	l/6 n	1.4	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	/6 n	1.7	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	l/g n	0.7	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
TOLUENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	2	l/g n	2.4	BDL	BDL	BDL	BDL	BDL
o-XYLENE	2	l/g π	1.3	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	BDL
ACETONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM		l/g ц	1.	BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	50	l/g n	6.0	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/g n	0.7	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	l/g n	1.7	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs		l/g μ	0.0	0.0	0.0	0.0	0.0	0.0
PHENANTHRENE	20	I/в п	1.0	BDL	BDL	BDL	BDL	BDL
FLUORENE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
PYRENE	20	l/6 n	1.0	BDL	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l∕g μ	1.0	BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l/g ျ	1.0	BDL	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	20	l/g μ	1.0	BDL	BDL	BDL	BDL	BDL
IRON, TOTAL	009	l/g ₁	2.0	45.0	56.0	46.0	48.0	
MANGANESE, TOTAL	009	l/g n	1.0	43.0	40.0	40.0	48.0	
SUM IRON & MANGANESE	1000	l/g 1	Υ Υ	88.0	0.96	86.0	0.96	0.0
NICKEL, TOTAL	2000	l/g ₁	5.0	2.0	4.0	4.0	3.0	
ARSENIC, TOTAL	20	l∕g ₁	48.0	BDL	BDL	BDL	BDL	
ALUMINUM, TOTAL CHROMIJM TOTAI	2000	л Б	40.0	BDL Pa	80F	BDL	BDL	
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March 3, 2003

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / January 2003

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the January 2003 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. The effluent discharge criteria were not exceeded during this time period.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Fry of Killy

Director of Hazardous Waste Services

PJW:JNW:jb Attachment

2: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

JANUARY 2003

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

PARAMETER	DISCHARGE	SLINO	COMP'T	WEEK 1 1/7/03	WEEK 2 01/14/03	WEEK 3 01/21/03	WEEK 4 01/28/03	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD	A A	840086	984057	976443	894579	
VINYL CHLORIDE	5	l/g н	1.1	BDL	BDL	BDL	BDL	BDL
,1-DICHLOROETHANE	2	l/g 1	<u></u>	BDL	BDL	BDL	BDL	BDL
,2(TRANS)-DICHLOROETHENE	2	l/g ¹	[BDL	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	ည	l/в п	1.0	BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	2	l/g n	4.1	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	/6 n	1.7	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	l/g n	0.7	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	2	l/g π	1.2	BDL	BDL	BDL	BDL	BDL
TOLUENE	2	b n	1.2	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	ည	l/g η	2.4	BDL	BDL	BDL	BDL	BDL
o-XYLENE	2	l/g π	1.3	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	2	l/в п	1.2	BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	∥ l/g ಗ	10.0	BDL	BDL	BDL	BDL	BDL
ACETONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	_	/в п	1.	BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	20	l/в п	6.0	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/в н	0.7	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	l/в ц	1.7	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	-	/в н	0.0	0.0	0.0	0.0	0.0	0.0
PHENANTHRENE	20	I/6 т	1.0	BDL	BDL	BDL	BDL	BDL
FLUORENE	20	l/в п	1.0	BDL	BDL	BDL	BDL	BDL
PYRENE	20	/в п	1.0	BDL	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	/6 п	1.0	BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l/g n	0.	BDL	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	/6 п	1.0	BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	20	l/β π	1.0	BDL	BDL	BDL	BDL	BDL
IRON, TOTAL	009	l/в и	2.0	42.0	0.89	64.0	85.0	
MANGANESE, TOTAL	009	l/6 п	0.1	26.0	43.0	46.0	46.0	
SUM IRON & MANGANESE	1000	/6 т	Δ Z	0.86	111.0	110.0	131.0	0.0
NICKEL, TOTAL	2000	l/g ₁	5.0	3.0	3.0	2.0	2.0	
ARSENIC, TOTAL	20	/б п	48.0	BDL	BDL	BDL	BDL	
ALUMINUM, TOTAL	2000	/6 n	40.0	BDL BD	BDL PD	BDL	24.0 ROI	



February 4, 2003

FEB 10 2003

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / December 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the December 2002 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. The effluent discharge criteria were not exceeded during this time period.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

DECEMBER 2002

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 12/3/02	WEEK 2 12/10/02	WEEK 3 12/17/02	WEEK 4 12/23/02	WEEK 5 12/30/02
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	l	657833 657833	657143 666600	638786 659200	837550 960900	837686 985467
VINYL CHLORIDE	5	/6 п	ı	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	2	l/g n		BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	l/g 11		BDL	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	2	l/в ц		BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	2	l/в ц		BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	1/6 n		BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	l/в и		BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	2	/6 п		BDL	BDL	BDL	BDL	BDL
TOLUENE	2	l/6 n		BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	2	l/g 1/		BDL	BDL	BDL	BDL	BDL
o-XYLENE	2	l/g n		BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	2	l/g n		BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	l/в ц		BDL	BDL	BDL	BDL	BDL
ACETONE	20	/в п		BDL	BDL	BDL	BDL	BDL
CHLOROFORM	7	l/g n		BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	20	l/6 п		BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	/6 п		BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	l/g 1		BDL	BDL	BDL	BDL	BDL
TOTAL VOCs		µ g/l		0.0	0.0	0.0	0.0	0.0
PHENANTHRENE	20	l/b n	ı	BDL	BDL	BDL	BDL	BDL
FLUORENE	20	/6 п		BDL	BDL	BDL	BDL	BDL
PYRENE	20	/6 n		BDL	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g 1/		BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l/g n		BDL	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	/6 п		BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	20	l∕g μ		BDL	BDL	BDL	BDL	BDL
IRON, TOTAL	009	l/g n		61.0	50.0	31.0	70.0	53.0
MANGANESE, TOTAL	009	l/g n		62.0	47.0	47.0	55.0	49.0
SUM IRON & MANGANESE	1000	l/g n		123.0	92.0	78.0	125.0	102.0
NICKEL, TOTAL	2000	/6 n		3.0	3.0	4.0	4.0	4.0
ARSENIC, TOTAL	20	l/g n		BDL	BDL	BDL	BDL	BDL
ALUMINUM, TOTAL CHROMIUM, TOTAL	2000	/6 n		BDL BDI	BDL	9.0 BDI	4.0 ICR	19.0 RDI
			Ш				200	1



January 13, 2003

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / November 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the November 2002 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. The only excedances for this period were the inorganics, manganese and sum of iron and manganese. These compounds are naturally occurring at the site and the observed elevated levels are attributable to the operation of on-site recovery well RW-3. This well was operated to progress the recovery of floating product.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

NOVEMBER 2002

		_									_	_					_				_						_			_		—		_
WEEK 5		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL			0.0				
WEEK 4 11/26/02	1017614 1105800	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	57.0	843.0	0.006	4.0	BDL	13.0 ICI	טטר
WEEK 3 11/19/02	990057 1118100	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	87.0	1060.0	1147.0	4.0	BDL	BDL	טטר
WEEK 2 11/12/02	1115167 1117125	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	35.0	884.0	919.0	4.0	BDL	BDL BDI	יטטר
WEEK 1 11/6/02	1124717 1195533	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	25.0	923.0	948.0	0.9	BDL	80L	טטר
COMP'T	A A A	1.1	1.1	1.1	1.0	4.1	1.7	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0	1.1	6.0	0.7	1.7	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	√ V	5.0	48.0	40.0	۷.4
UNITS	GPD GPD	l/в ц	l/6 т	l/g n	/6 п	l/g n	l/в н	l/6 11	l/g ц	/6 n	l/g n	l/g n	l/6 π	l/g n	l/g n	l/g n	l/g n	∥g π	l/g n	l/g n	l/g n		l/g n		/6 п	l/g 1	η g/l	l/g n	l/g n	/в п	/в п	l/g n	л Д	1 y 1
DISCHARGE LIMITATIONS	MONITOR	5	2	2	2	2	10	0.7	2	2	2	2	2	20	20	_	20	20	10		20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000	\ \ \
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHENE	1,2(CIS)-DICHLOROETHENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHENE	BENZENE	TETRACHLOROETHENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	TOTAL VOCs	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, TOTAL	טווייי, יייסווייי

JANUARY 2003 OUTFALL 001G

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WEEK 5			0														_																				0.0
WEEK 4 01/27/03			0	0	0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	ם מ	שר מים	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL 85.	BDL 85.	RDL PDI	BDI	8DI	BDL	BDL	0.0
WEEK 3 01/20/03			0	0	0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDI I	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL BDI	BDL BD:	BDL	BDI.	BDI	BDL	BDL	0.0
WEEK 2 01/13/03			0	0	0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	מטר ורמ	RDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL BD!	BDL BD.	801	801	מ מ	BDL	BDL	BDL	0.0
WEEK 1 01/07/03			0	0	0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	מטר ב	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL BD.	BDL BD-		BOL	מק מ	BDL	BDL	BDL	0.0
COMP'T MDL	NA						1.3		0.7	1.	1.2	0.7	7.2	4 C	5 6	1 2.	<u></u>	1.2	4.1	6.0	1.0	0.8	6.0	1.0	1.	-	1.0	ნ. 0 ი) ()	4. 0	4.7	- 7	· C	<u> </u>	1.3	1.6	0.0
UNITS	GPD	sn		l/g n	1/6 n	l/g n	1/6 n	1/6 1i	l/g n	/6 11	l/g n]/b 11)) 1. =	/b 11	- I/b	1/b 11	/b 11	/b 11	/б н	l/g n	l/g ₁₁	/в п	l∕g n	l∕g ₁	l/g n	п g/I	1, g/1	- 1 0 (0))))	55 5		, d	/g 11	/g 11.	l/g n
DISCHARGE	MONITOR	6.5-8.5	4.7	2	50	90	2	90	20	0.2	ر م	0.7	nΩ	ט ע	2.2	2	2	6.0	5	0.5	0.3	~	4.7	2	2	വ	4.7	77 (7 4	n 4	n 4	o (ۍ در	υ Ω	5	5	100
EFFLUENT PARAMETER	FLOW, DAILY MAX	Hd	TOTAL AGG CONC #1	TOTAL AGG CONC #2	TOTAL AGG CONC #3	DICHLOROBROMOMETHANE	CARBON TETRACHLORIDE	BROMOFORM	DIBROMOCHLOROMETHANE	CHLOROFORM	TOLUENE	BENZENE	CHLOROBENZENE	METHY! CH! OBIDE	TETRACHLOROETHENE	TRICHLOROFLUOROMETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,1,1-TRICHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1,2,2 TETRACHLOROETHANE	1,2-DICHLOROETHANE	1,2 DICHLOROBENZENE	1,2 DICHLOROPROPANE	1,2(TRANS)-DICHLOROETHENE	1,3 DICHLOROBENZENE	1,4 DICHLOROBENZENE	I KANS 1,3 DICHLOROPROPENE				TRICHI OROFTHENE	12/CIS)-DICHI OROFTHENE	1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	o-XYLENE	CHLOROETHANE	TOTAL VOCs

2003	001G
FEBRUARY	OUTFALL

EFFLUENT DIS	DISCHARGE	UNITS	COMP'T	WEEK 1 02/03/03	WEEK 2 02/10/03	WEEK 3 02/17/03	WEEK 4 02/25/03	WEEK 5
Σ	MONITOR	GPD	NA					
	5.5-8.5	ns						
	4.7	l/g n		0	0	0	0	0
	2	g/l		0			0	
	20			0			0	
	20	/6 11	6.0	BDL	BDL	BDL	BDL	
	2	l/6 11	1 .3	BDL	BDL	BDL	BDL	
	20	l/g 11	0.7	BDL	BDL	BDL	BDL	
	20	l/g 11	0.7	BDL	BDL	BDL	BDL	
	0.2	l/g 11	1.1	BDL	BDL	BDL	BDL	
	5	/b 11	1.2	BDL	BDL	BDL	BDL	
	0.7	/b . 11	0.7	BDL	BDL	BDL	BDI	
	2	/b 11	1.2	BDL	BDL	BDL	BDI	
	2	/b 11	4.	BDL	BDL	BDL	BDL	
	2	/b 11	0.1	BDL	BDL	BDI	BDI	
	2.2	/b 11	1.2	BDL	BDL	BDL	BDI	
	5	/b 11	1.2	BDL	BDL	BDL	BDL	
	5	/b 11	1.1	BDL	BDL	BDL	BDL	
	9.0	/b 11	1.2	BDL	BDL	BDL	BDL	
	5	/b 11	4.1	BDL	BDL	BDL	BDL	
O	.5	l/g 11	6.0	BDL	BDL	BDL	BDL	
O	.3	1/6 n	1.0	BDL	BDL	BDL	BDL	
	_	l/g 11	8.0	BDL	BDL	BDL	BDL	
4	7	l/g 11	6.0	BDL	BDL	BDL	BDL	
	2	l/g n	1.0	BDL	BDL	BDL	BDL	
	2	и g/I	-	BDL	BDL	BDL	BDL	
	2	l/g 11	.	BDL	BDL	BDL	BDL	
4	<u> </u>	l/в п	1.0	BDL	BDL	BDL	BDL	
	2	1/6 1i	6.0	BDL	BDL	BDL	BDL	
	7	/6 n	6.0	BDL	BDL	BDL	BDL	
	2	1/6 11	2.4	BDL	BDL	BDL	BDL	
	2	l/g 11	2.4	BDL	BDL	BDL	BDL	
	5	l/g n	<u></u>	BDL	BDL	BDL	BDL	
	10	l/g 11	1.7	BDL	BDL	BDL	BDL	
	2	l/g n	1.0	BDL	1.8	1.3	BDL	
	2	l/g n		BDL	BDL	BDL	BDL	
	2	l∕g n	1.3	BDL	BDL	BDL	BDL	
	5	/b n	1.6	BDL	BDL	BDL	BDL	ı
	100	1/6 H	0.0	0.0	2.8	1.3	0.0	0.0

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T	WEEK 1 03/03/03	WEEK 2 03/10/03	WEEK 3	WEEK 4	WEEK 5
FLOW, DAILY MAX	MONITOR	GPD	NA				200	
Hď	6.5-8.5	Su						
TOTAL AGG CONC #1	4.7			0	0	0	С	C
TOTAL AGG CONC #2	2				,)))
TOTAL AGG CONC #3	90	/b 11						
DICHLOROBROMOMETHANE	90		6.0	BDL	BDL	BDL	BDL	BDI
CARBON TETRACHLORIDE	5	/b 11	1.3	BDL	BDL	BDL	BDL	BDI
BROMOFORM	90	/b 11	0.7	BDL	BDL	BDL	BDL	BDI
DIBROMOCHLOROMETHANE	50	1/6 ii	0.7	BDL	BDL	BDL	BDL	BDI
CHLOROFORM	0.2	/b 1	1.1	BDL	BDL	BDL	BDL	BDI
TOLUENE	5		1.2	BDL	BDL	BDL	BDL	BDI
BENZENE	0.7	l/g n	0.7	BDL	BDL	BDL	BDL	BDI
CHLOROBENZENE	5		1.2	BDL	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
METHYL CHLORIDE	5	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	2.2	l/g n	1.2	BDL	BDL	BDL	BDL	3.5
TRICHLOROFLUOROMETHANE	5		1.2	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5		1.1	BDL	BDL	BDL	BDL	BDL
	6.0		1.2	BDL	BDL	BDL	BDI	108
	5	/6 n	1.4	BDL	BDL	BDL	BDI	3 2
1,1,2-TRICHLOROETHANE	0.5		6.0	BDL	BDI	108	BDI	, C
1,1,2,2 TETRACHLOROETHANE	0.3	/b 11	1.0	BDL	BDL	BDL	BDL	BDI
	-	l/g n	0.8	BDL	BDL	BDL	BDL	BDI
1,2 DICHLOROBENZENE	4.7	l/6 11	6.0	BDL	BDL	BDL	BDL	BDI
1,2 DICHLOROPROPANE	5		1.0	BDL	BDL	BDL	BDL	BDI
1,2(TRANS)-DICHLOROETHENE	2	l/g n	1.1	BDL	BDL	BDL	BDL	BDI
1,3 DICHLOROBENZENE	5		1.1	BDL	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7		1.0	BDL	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2		6.0	BDL	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2		6.0	BDL	BDL	BDL	BDL	BDL
m.p-XYLENE	5		2.4	BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	5		2.4	BDL	BDL	BDL	BDL	BDL
VINYL CHLORIDE	2		1.1	BDL	BDL	BDL	BDL	BDI
TRICHLOROETHENE	10		1.7	BDL	BDL	BDL	BDL	BDI
1,2(CIS)-DICHLOROETHENE	5		1.0	6.5	9.7	8.9	6.8	2.5
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	2	l/g n		BDL	BDL	BDL	BDL	BDL
O-XYLENE	S		1.3	BDL	BDL	BDL	BDL	BDL
CHLOROE HANE	2		1.6	BDL	BDL	BDL	BDL	BDL
I U I AL VOCS	100		0.0	6.5	9.7	8.9	8.9	6.0

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 04/07/03	WEEK 2 04/14/03	WEEK 3 04/21/03	WEEK 4 04/28/03	WEEK 5
FLOW, DAILY MAX		GPD	NA					
Hď.	6.5-8.5	sn						
TOTAL AGG CONC #1	4.7			0	0	0	0	
TOTAL AGG CONC #2	2	l/g n		0	0	0		_
TOTAL AGG CONC #3	90	l/g 1i		0	0	0		
DICHLOROBROMOMETHANE	90	и g/I	6.0	BDL	BDL	BDL	BDL	
CARBON TETRACHLORIDE	2	1/6 n	1.3	BDL	BDL	BDL	BDL	
BROMOFORM	20	l/g n	2.0	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	20	1/6 11	0.7	BDL	BDL	BDL	BDL	
CHLOROFORM	0.5	l/g n	<u>_</u>	BDL	BDL	BDL	BDL	
TOLUENE	5 .	l/g n	1.2	BDL	BDL	BDL	BDL	
BENZENE () () () () () () () () () () () () () (0.7	l/6 11	0.7	BDL	BDL	BDL	BDL	
CHLOROBENZENE	ς,	l/g n	1.2	BDL	BDL	BDL	BDL	
METUNI OUI ODIDE	ຄເ	1/6 n	1.2	BDL	BDL	BDL	BDL	
TETPACHI OBOETHENE	ດີ	1/6 n		BDL BD:	BDL	BDL	BDL	
TRICHLOROFI UOROMETHANE	2.7)))))	1 C	BDL BDL	BDL BDL	BDL	BDL	
1.1-DICHLOROETHANE	י ער	j	i -	80 E	שם ה	BDL	פטר	
1,1-DICHLOROETHENE	6.0	, D		801	ש ה	ם מ	חחש	
1,1,1-TRICHLOROETHANE	5	1/0	4	BDI	BD [B 2	ש ה ה	
1,1,2-TRICHLOROETHANE	0.5	1/0 11	6.0	BDL	BDI	BD I	BDI C	_
1,1,2,2 TETRACHLOROETHANE	0.3	/b 11	1.0	BDL	BDL	BDL	BDI	
	-	1/6 H	8.0	BDL	BDL	BDL	BDL	
1,2 DICHLOROBENZENE	4.7	/6 n	6.0	BDL	BDL	BDL	BDL	
1,2 DICHLOROPROPANE	5	l/g 11	1.0	BDL	BDL	BDL	BDL	
1,2(TRANS)-DICHLOROETHENE	2	1/6 n	<u></u>	BDL	BDL	BDL	BDL	
1,3 DICHLOROBENZENE	5	l/g 11	1.	BDL	BDL	BDL	BDL	
1,4 DICHLOROBENZENE	4.7	l/g 11	1.0	BDL	BDL	BDL	BDL	
TRANS 1,3 DICHLOROPROPENE	2	1/6 1d	6.0	BDL	BDL	BDL	BDL	
CIS 1,3 DICHLOROPROPENE	2	1/6 1i	6.0	BDL	BDL	BDL	BDL	
m,p-XYLENE	2	1/6 1i	2.4	BDL	BDL	BDL	BDL	
BROMOMETHANE	2	l/g n	2.4	BDL	BDL	BDL	BDL	
VINYL CHLORIDE	2	/b 11	<u>_</u>	BDL	BDL	BDL	BDL	
TRICHLOROETHENE	10	1/6 H	1.7	BDL	BDL	BDL	BDL	
1,2(CIS)-DICHLOROETHENE	2	1/6 1i	1.0	BDL	BDL	BDL	1.7	
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	2	/b 1i		BDL	BDL	BDL	BDL	
O-XYLENE	2	/6 1i	1.3	BDL	BDL	BDL	BDL	_
CHLOROE HANE	2	1/B 11	9.0	BDL	BDL	BDL	BDL	
IOIAL VOCS	001	ir g/1	0.0	0.0	0.0	0.0	17	0.0

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	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 05/05/03	WEEK 2 05/12/03	WEEK 3 05/19/03	WEEK 4 05/26/03	WEEK 5
FLOW, DAILY MAX	MONITOR	GPD	NA					
Hd	6.5-8.5	su						
TOTAL AGG CONC #1	4.7			0	0	0	0	
TOTAL AGG CONC #2	2	l/g n		0	0	0	0	
TOTAL AGG CONC #3	90			0	0	0	0	
DICHLOROBROMOMETHANE	90	l/g n	6.0	BDL	BDL	BDL	BDL	
CARBON TETRACHLORIDE	5	1/6 11	1.3	BDL	BDL	BDL	BDL	
BROMOFORM	90	l/g n	0.7	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	50	1/6 11	0.7	BDL	BDL	BDL	BDL	
CHLOROFORM	0.2	1/6 11	1.1	BDL	BDL	BDL	BDL	
TOLUENE	5	l/g n	1.2	BDL	BDL	BDL	BDL	
BENZENE	0.7	l/g n	0.7	BDL	BDL	BDL	BDL	
CHLOROBENZENE	5	l/g ii	1.2	BDL	BDL	BDL	BDL	
ETHYLBENZENE	5	1/6 n	1.2	BDL	BDL	BDL	BDL	
METHYL CHLORIDE	2	l/g n	1.0	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	2.2	l/g n	1.2	8.2	BDL	BDL	BDL	
IRICHLOROFLUOROMETHANE	2	l/g n	1.2	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHANE	2	/6 11	1.	<u></u>	BDL	BDL	BDL	
1,1-DICHLOROETHENE	6.0	l/g ii	1.2	BDL	BDL	BDL	BDL	
1,1,1-TRICHLOROETHANE	5	l/g 11	1.4	BDL	BDL	BDL	BDL	
	0.5	l/g ii	6.0	BDL	BDL	BDL	BDL	
1,1,2,2 TETRACHLOROETHANE	0.3	l/g n	1.0	BDL	BDL	BDL	BDL	
1,2-DICHLOROETHANE	-	l/g n	8.0	BDL	BDL	BDL	BDL	
1,2 DICHLOROBENZENE	4.7	1/6 H	6.0	BDL	BDL	BDL	BDL	
1,2 DICHLOROPROPANE	5	l/g 1i	1.0	BDL	BDL	BDL	BDL	_
1,2(TRANS)-DICHLOROETHENE	2	l/g n	1.1	BDL	BDL	BDL	BDL	
1,3 DICHLOROBENZENE	5	l/g n	1.	BDL	BDL	BDL	BDL	
1,4 DICHLOROBENZENE	4.7	l/g ii	1.0	BDL	BDL	BDL	BDL	-
TRANS 1,3 DICHLOROPROPENE	2	l/g n	6.0	BDL	BDL	BDL	BDL	
CIS 1,3 DICHLOROPROPENE	2	l/g n	6.0	BDL	BDL	BDL	BDL	
m,p-XYLENE	5	/6 n	2.4	BDL	BDL	BDL	BDL	
BROMOMETHANE	5	1/6 n	2.4	BDL	BDL	BDL	BDL	
VINYL CHLORIDE	5	1/6 n	1.1	2.5	BDL	BDL	BDL	_
TRICHLOROETHENE	10	1/b 11	1.7	6.4	BDL	BDL	BDL	
1,2(CIS)-DICHLOROETHENE	5	1/6 11	1.0	14.4	8.1	0.9	BDL	_
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	l/6 11		BDL	BDL	BDL	BDL	
o-XYLENE	2	l/6 11	1.3	BDL	BDL	BDL	BDL	
CHLOROETHANE	5,		1.6	BDL	BDL	BDL	BDL	_
IOIAL VOCS	001	1/6 1i	0.0	32.6	8.1	0.9	0.0	0.0

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1.2	1.2											
	1.2 BDL	8 D L B D L B D L		300 800 800 800 800 800								

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 07/07/03	WEEK 2 07/14/03	WEEK 3 07/21/03	WEEK 4 07/29/03	WEEK 5
FLOW, DAILY MAX	MONITOR	GPD	NA					
Hd	6.5-8.5	ns						
TOTAL AGG CONC #1	4.7			0	က	0	0	С
TOTAL AGG CONC #2	2	l/g n		0	0	0	0	0
TOTAL AGG CONC #3	90	1/6 n		0	0	0	0	0
DICHLOROBROMOMETHANE	20	I/в н	6.0	BDL	BDL	BDL	BDL	
CAKBON IEIKACHLORIDE	დ (]/b 1i	ر .	BDL	BDL	BDL	BDL	
BROMOFORM DIBBOMOCHI OBOMEHI SIII	20	/6 1i	0.7	BDL	BDL	BDL	BDL	
DIBROMOCHLOROIME I HAINE CHI OROFORM	o c	/b 1) . \ 	BDL BDI	BDL IV	BDL	BDL	
TOLUENE	4. 6	ה כ ז. ב		מטר ב) 7 2	100	BUL 10	
BENZENE	0.7	, b	7.0	BDI	8.7	 	 	
CHLOROBENZENE	2	т д Г/в	1.2	BDL	BDL	BDL	BDL	
ETHYLBENZENE	5	l/6 11	1.2	BDL	BDL	BDL	BDL	
METHYL CHLORIDE	2	l/6 1i	1.0	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	2.2	l/6 11	1.2	4.0	4.0	BDL	20.8	
HAN	ις Ω	/6 n	1.2	BDL	BDL	BDL	BDL	
	2	l/g n	<u>_</u>	BDL	BDL	BDL	BDL	
	6.0	l/6 n	1.2	BDL	BDL	BDL	BDL	
	2	1/6 n	4.	BDL	4.2	BDL	2.7	
1,1,2-TRICHLOROETHANE	0.5	/6 н	6.0	BDL	BDL	BDL	BDL	
NAHL	e.0	l/6 11	1.0	BDL	BDL	BDL	BDL	
	- <u>'</u>	j/g 11	8.0	BDL	BDL	BDL	BDL	
	4.7	/6 n	6.0	BDL	2.7	BDL	BDL	_
1,2 DICHLOROPROPANE	5	l/g ii	1.0	BDL	BDL	BDL	BDL	
1,2(TRANS)-DICHLOROETHENE	5	/6 1i	1.	BDL	19.3	BDL	BDL	
1,3 DICHLOROBENZENE	ഗ	l/g 1i	<u></u>	BDL	BDL	BDL	BDL	_
1,4 DICHLOROBENZENE	4.7	l/g n	1.0	BDL	BDL	BDL	BDL	
TRANS 1,3 DICHLOROPROPENE	7	l/g n	6.0	BDL	BDL	BDL	BDL	
CIS 1,3 DICHLOROPROPENE	2	l/g 11	6 [.] 0	BDL	BDL	BDL	BDL	
m,p-XYLENE	လ]/6 n	2.4	BDL	BDL	BDL	BDL	
BROMOMETHANE	2	/6 n	2.4	BDL	BDL	BDL	BDL	
VINYL CHLORIDE	5	/6 n	<u>_</u>	BDL	BDL	BDL	BDL	
TRICHLOROETHENE	10	/g 11	1.7	6.1	10.4	BDL	12.5	-
1,2(CIS)-DICHLOROETHENE	2	1/6 11	1.0	19.3	23.9	8.8	15.9	
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	2	l/g 1i		BDL	BDL	BDL	BDL	
O-XYLENE	လ	l/b ii	ر ن	BDL	BDL	BDL	BDL	
CHLOROETHANE	, ,	1/6 11	1.6	BDL	BDL	BDL	BDL	
IOIAL VOCS	100	1/6 n	0.0	29.4	6.69	10.7	53.8	0.0

l 1	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 08/04/03	WEEK 2 08/11/03	WEEK 3 08/18/03	WEEK 4 08/25/03	WEEK 5
FLOW, DAILY MAX	MONITOR	GPD	NA					
Hd	6.5-8.5	sn						
TOTAL AGG CONC #1	4.7			က	0	0	0	C
TOTAL AGG CONC #2	7	/b 11		0	0	0	. 0) C
TOTAL AGG CONC #3	50	J/B 11		0	0	0	0	0 0
DICHLOROBROMOMETHANE	90	1/g 11	6.0	BDL	BDL		BDL)
CARBON TETRACHLORIDE	5	/6 n	1.3	BDL	BDL		BDL	
BROMOFORM	90	1/g 11	0.7	BDL	BDL		BDL	
DIBROMOCHLOROMETHANE	50	l/g n	0.7	BDL	BDL		BDL	
CHLOROFORM	0.2	1/6 n	<u>_</u> .	BDL	BDL		BDL	
TOLUENE	5	1/g 11	1.2	3.5	4.1		1.5	
BENZENE	0.7	1/g n	0.7	BDL	BDL		BDL	
CHLOROBENZENE	5	1/6 n	1.2	BDL	BDL		BDL	
ETHYLBENZENE	5	1/6 n	1.2	BDL	BDL		BDL	
METHYL CHLORIDE	5	1/6 n	1.0	BDL	BDL		BDL	
TETRACHLOROETHENE	2.2	/в н	1.2	26.8	10.8		4.3	
TRICHLOROFLUOROMETHANE	2	1/6 n	1.2	BDL	BDL		BDL	
1,1-DICHLOROETHANE	5	1/g 11	1,	BDL	BDL		BDL	
	6.0	1/6 rl	1.2	BDL	BDL		BDL	
	5	1/6 n	1.4	4.2	BDL		BDL	
	0.5	1/6 n	6.0	BDL	BDL		BDI	
1,1,2,2 TETRACHLOROETHANE	0.3	1/6 H	1.0	BDL	BDL		BDL	_
	_	1/6 n	8.0	BDL	BDL		BDL	
1,2 DICHLOROBENZENE	4.7	/g 11	6.0	2.7	BDL		BDL	
1,2 DICHLOROPROPANE	5	/6 n	1.0	BDL	BDL		BDL	
1,2(TRANS)-DICHLOROETHENE	2	/в п	<u>_</u> .	BDL	BDL		BDL	
1,3 DICHLOROBENZENE	5	/b n	1.1	BDL	BDL		BDL	
1,4 DICHLOROBENZENE	4.7	l/g n	1.0	BDL	BDL		BDL	
TRANS 1,3 DICHLOROPROPENE	2	/g 1	6.0	BDL	BDL		BDL	
CIS 1,3 DICHLOROPROPENE	2	1/b 11	6.0	BDL	BDL		BDL	
m,p-XYLENE	5	1/6 11	2.4	BDL	BDL		BDI	
BROMOMETHANE	5		2.4	BDL	BDL			-
VINYL CHLORIDE	5	1/b 11	-	BDL	BDI			
TRICHLOROETHENE	10	/b 11	1.7	22.6	7.2		575	
1,2(CIS)-DICHLOROETHENE	5		1.0	38.7	7.4		14.8	
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	l/g n		BDL	BDL		BDL	
o-XYLENE	5	l/g ii	1.3	BDL	BDL		BDL	
CHLOROETHANE	5	l/g n	1.6	BDL	BDL		BDL	
IOIAL VOCs	100	g/	0	101.2	26.8	0.0	26.3	0 0

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NA 7.29 7.15 6.91 NA 1.1 0.0 0.0 0.0 NA 0.0 0.0 0.0 0.0 NA 1.1 0.0 0.0 0.0 NA 1.2 2.3 2.3 2.5 NA 1.2 8DL	EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T	WEEK 1 09/02/03	WEEK 2 09/08/03	WEEK 3 09/15/03	WEEK 4 09/22/03	WEEK 5 09/29/03
6.50-8.50 4.7 μg/l NA 7.29 7.15 6.91 4.7 μg/l NA 0.0 0.0 0.0 5.0 μg/l NA 0.0 0.0 0.0 5.0 μg/l NA 0.0 0.0 0.0 6.0 μg/l 0.9 BDL		MONITOR	GPD	NA					
4.7 μg/l NA 1.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		6.50-8.50	ns	ΑN	7.29	7.15	6.91	6.73	6.83
2 μg/l NA 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.		4.7		Ϋ́	7.	0.0	0.0	0.0	0.0
50 μg/l NA 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.		2		₹Z	0.0	0.0	0.0	0.0	0.0
50 μg/l 0.9 BDL		90		Ϋ́	0.0	0.0	0.0	0.0	0.0
5.0 μg/l 0.7 BDL		50	1/6 n	6.0	BDL	BDL	BDL	BDL	BDL
50 μg/l 0.7 BDL BDL BDL BDL BDL CO.2 μg/l 0.7 BDL		υ <u>(</u>	1/6 11	ر نن ا	BDL	BDL	BDL	BDL	BDL
50. μg/l 1.1 BDL	_	20	1/6 11	0.7	BDL	BDL	BDL	BDL	BDL
5		200	1/6 1.	7.7	BDL PDL	BDL	BDL	BDL	BDL
1.2 BDL		7. 7.			23.	23	50L	BUL	פטו
5		0.7)) 1 1	7.0	8DI	8.3 BDI	2.2 ICR	2.0 D. C.	BDI RDI
5 μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ		2	/g 11	1.2	BDL	BDL	BDL	BDL	BDI
5		2	1/6 1i	1.2	BDL	BDL	BDL	BDL	BDL
2.2		2	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
5		2.2	l/g n	1.2	12.3	26.8	26.0	26.8	BDL
5. μg/l 1.1 BDL BDL BDL BDL 6.9 μg/l 1.2 BDL	_	ı,	1/6 n	1.2	BDL	BDL	BDL	BDL	BDL
6.9 μg/l 1.2 BDL	_	5	1/6 11	<u></u>	BDL	BDL	BDL	BDL	BDL
5. μg/l 1.4 1.9 5.5 5.4 0.5 μg/l 0.9 BDL		6.0 0	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
0.5 μg/l 0.9 BDL BDL BDL BDL BDL 4.7 μg/l 0.9 BDL		2	l/g n	4.	9.1	5.5	5.4	9.9	BDL
1 μg/l 0.8 BDL		0.5	l/в п	6.0	BDL	BDL	BDL	BDL	BDL
4.7 \(\text{in g/l} \) 0.8 \(\text{BDL} \) \(\text{in g/l} \) 0.9 \(\text{in g/l} \) 0.9 \(\text{in g/l} \) 1.0 \(\text{BDL} \) \(\text{BDL} \) \(\text{BDL} \) \(\text{in g/l} \) 1.1 \(\text{BDL} \) \		o		0.0	BDL	BDL	BDL	BDL	BDL
4.7 μg/l 0.9 1.1 BDL	_	_ ,		8.0	BDL	BDL	BDL	BDL	BDL
2 μg/l 1.1 BDL		7.4	1/6 11	D. 6	- 0	BDL	BDL	BDL	BDL
4.7 μg/l 1.1 BDL		ი ი) 10 11	- <i>4</i> 5 <i>4</i>	BUL	BDL BD.	BDL	BDL	BDL
4.7 µg/l 1.0 BDL		7 15	1/6 1/0 1/0		מ מ	BDL BDI	BDL BDL	BDL	BDL
2		4.7) h o		RD I	BDI	ב ה ה	מקר ביים	BDI
2 μg/l 0.9 BDL		2	л р П/б	6.0	BDL	BDL	BDL	BDI	BD
5 μg/l 2.4 BDL BDL BDL BDL BDL 10 μg/l 1.7 11.1 18.1 18.6 μg/l 1.0 18.0 33.8 24.5 μg/l 1.3 BDL		2	1/6 n	6.0	BDL	BDL	BDL	BDL	BDL
5 μg/l 2.4 BDL BDL BDL BDL 1.1 BDL	_	2		2.4	BDL	BDL	BDL	BDL	BDL
5 μg/l 1.1 BDL BDL BDL BDL 18.6 5 μg/l 1.0 18.0 33.8 24.5 5 μg/l 1.3 BDL BDL BDL BDL BDL 5 μg/l 1.3 BDL BDL BDL BDL BDL BDL BDL BDL BDL	_	5	/6 1i	2.4	BDL	BDL	BDL	BDL	BDL
10 μ g/l 1.7 11.1 18.1 18.6 5 μ g/l 1.0 18.0 33.8 24.5 5 μ g/l 1.3 BDL BDL BDL 5 μ g/l 1.6 BDL BDL BDL		5	l/g ii	<u></u>	BDL	BDL	BDL	BDL	BDL
5 μg/l 1.0 18.0 33.8 24.5 5 μg/l 1.3 BDL BDL BDL 5 μg/l 1.6 BDL BDL BDL		10	l/g ii	1.7	11.1	18.1	18.6	21.3	BDL
HANE 5 µ g/l 1.3 BDL BDL BDL 5 µ g/l 1.6 BDL BDL BDL		2	l/g 11	0.	18.0	33.8	24.5	28.4	BDL
μ g/l 1.6 BDL BDL BDL μ g/l 1.6 BDL BDL	HANE	S	/g 11		∢ Z	₹ Z	₹ Z	₹ Z	۲ ۲
it g/l 1.6 BDL BDL BDL BDL		Ωı	/6 1i	<u>ر.</u> . س ر	BDL	BDL	BDL	BDL	BDL
107	_	v (1/6 1i	9.0	BDL	BDL	BDL	BDL	BDL

SEPTEMBER 2003 OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE	SLINO	COMP'T	WEEK 1 10/06/03	WEEK 2 10/13/03	WEEK 3 10/20/03	WEEK 4 10/28/03	WEEK 5
FLOW, DAILY MAX	MONITOR	GPD	NA					
Hd	6.50-8.50	ns	AN	6.80	5.89	66.9	6.88	
TOTAL AGG CONC #1	4.7	l/g n	ΑN	0.0	0.0	0.0	0.0	0.0
TOTAL AGG CONC #2	2	l/g ii	ΥZ	0.0	0.0	0.0	0.0	0.0
TOTAL AGG CONC #3	20	l/6 11	Ϋ́	0.0	0.0	0.0	0.0	0.0
DICHLOROBROMOMETHANE	50	l/g n	6.0	BDL	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	သ	l/g n	1.3	BDL	BDL	BDL	BDL	BDL
BROMOFORM	20	l/β π	0.7	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/6 н	0.7	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	0.5	l/g n	<u>. </u>	BDL	BDL	BDL	BDL	BDL
- OLUENE BENJENT	5 0	/б н	1.2	BDL	BDL	BDL	BDL	BDL
BENZENE CHI OBOBENIZENIE	٧.٠	т g/	0.7	BDL	BDL	BDL	BDL	BDL
CHLOROBEINZEINE ETHVI BENIZEINE	Ω u	/b z	7. (BDL BDI	BDL	BDL	BDL	BDL
METHYL CHLORIDE	ი •	50 6 1. =	. t	BDL	מ ב	BDL	BDL BDI	BDL
TETRACHLOROETHENE	2.2)) 1. =	5 6	BD I	מטר	BDI.	BDL	מקם בים
TRICHLOROFLUOROMETHANE	5) 0 1. 1	1.2	BDI	BDI	200		מטר מטר
	5	п д/г	1.	BDL	BDL	BDI	80	מ ב
	6.0	/б п	1.2	BDL	BDL	BDL	8DI	BDI
	5	/b ==	4.	BDL	BDL	BDL	BDL	BDI
1,1,2-TRICHLOROETHANE	0.5	/6 n	6.0	BDL	BDL	BDL	BDL	BDL
ETHAN	0.3	l/g ii	1.0	BDL	BDL	BDL	BDL	BDL
	_	l∕g ₁₁	8.0	BDL	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	∥β π	6.0	BDL	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	2	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
1,2(1RANS)-DICHLOROETHENE	7	l/g n	<u>.</u>	BDL	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	ر ر	l/в н	. .	BDL	BDL	BDL	BDL	BDL
THE AND 13 PICH OROBED THE	7.7	n g/l	0.0	BDL	BDL	BDL	BDL	BDL
CIN 1 3 DICHLOROPROPENE	ν c	1/6 1i	ک ک ک	BDL BDL	BDL	BDL	BDL	BDL
R P-XY ENF	7 U	50 6) C	BDL	BDL BDL	- A	BDL BDI	BDL
BROMOMETHANE	ט ע	5) E	7 C			a DL	BDL BD.	BDL BD
VINYI CHI OBIDE	י ע	50 E	1.4	פטר	BDL	, ED	BDL BDI	BDL PD
TRICHLOROETHENE	> €	50 5		BDI		BDL	BDL BDL	RDL P. C.
1.2(CIS)-DICHI OROFTHENE	. r.)) 1. =		שטור	שטר שטר	ם בכם		מטר
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	Ω Ω) 1 =	2	N AN	N V		NA NA	
o-XYLENE	2	. /b	1.3	BDL	BDL	BDI		2 2
CHLOROETHANE	S	1/6 11	1.6	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	100	/β π	0.0	0.0	0.0	0.0	0.0	0.0

OCTOBER 2003 OUTFALL 001G



December 12, 2002

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / October 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the October 2002 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. The only excedance for this period was the inorganic, manganese. This compound is naturally occurring at the site and the observed elevated levels are attributable to the operation of on-site recovery well RW-3. This well was operated to progress the recovery of floating product.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

OCTOBER 2002 NASSAU COUNTY FIREMAN'S TRAINING CENTER

GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT	DISCHARGE	UNITS	COMP'T	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
PARAIVIE I ER	LIMITATIONS		MDL	70/1/01	10/08/02	10/15/02	10/22/02	10/29/02
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	∢	1180214 1195500	1144386 1162200	980442 1213000	1150000 1248700	1197429
VINYL CHLORIDE	5	l/β ή	1.1	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	l/g n	1.1	BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	l/g n	1.1	BDL	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	2	l/в и	1.0	BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	2	l/g 1/	4.1	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	9	l/g n	1.7	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	/6 n	0.7	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
TOLUENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	2	l/g n	2.4	BDL	BDL	BDL	BDL	BDL
o-XYLENE	2	l/g n	1.3	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	l/в п	10.0	BDL	BDL	BDL	BDL	BDL
ACETONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM		/6 n	1.1	BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/g n	0.7	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	l/g 4	1.7	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs		μ g/l	0.0	0.0	0.0	0.0	0.0	0.0
PHENANTHRENE	20	l/β π	1.0	BDL	BDL	BDL	BDL	BDL
FLUORENE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
PYRENE	20	l/g 1	1.0	BDL	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	/6 n	1.0	BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	20	l∕g μ	1.0	BDL	BDL	BDL	BDL	BDL
IRON, TOTAL	009	l/g n	2.0	0.99	64.0	49.0	31.0	45.0
MANGANESE, TOTAL	009	l/g n	1.0	1080.0	952.0	1020.0	1060.0	893.0
SUM IRON & MANGANESE	1000	l/g n	ΨZ	1146.0	1016.0	1069.0	1091.0	938.0
NICKEL, TOTAL	2000	/g n	5.0	4.0	4.0	0.9	5.0	0.9
ARSENIC, TOTAL	20	l/g n	48.0	7.0	BDL	BDL	BDL	BDL
ALUMINUM, TOTAL CHROMIUM, TOTAL	2000	л л /б п	40.0 2.0	BDL BDL	BDL	22.0 BDI	BDL BDI	13.0
		-						2

NOV 1





COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

October 28, 2002

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / August 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the August 2002 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. The only excedances for this period were for the inorganics, manganese and combined iron and manganese. These compounds are naturally occurring at the site and the observed elevated levels are attributable to the operation of on-site recovery well RW-3. This well was operated to progress the recovery of floating product.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb Attachment

Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, regional Water Engineer, Region 1, NYSDEC

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

SEPTEMBER 2002

week 5	0.0								_											0.0		-								0.0			
WEEK 4 09/24/02	1189686 1316000	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDF	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	43.0	1030.0	1073.0	3.0	BDL	BD
WEEK 3 09/17/02	1116271 1226300	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	71.0	1070.0	1141.0	4.0	BDL	BDL
WEEK 2 09/10/02	1228872 1228900	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	73.0	1230.0	1303.0	2.0	BDL	BDL
WEEK 1 9/3/02	841367 1213100	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	23.0	1800.0	1823.0	2.0	BDL	BDL
COMP'T	N N A A	1.1	1.1	1.1	1.0	4.1	1.7	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0	1.1	60	0.7	1.7	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	ΑŽ	5.0	48.0	40.0
UNITS	GPD GPD	l/g η	l/g π	l/g n	l/g n	l/g n	l/g n	l/g n	/6 n	l/g n	l/g ų	l/g μ	l/g n	l/g π	/в п	l/g n	l/g n	/6 n	l/g n	l/g n	l/g n	/6 ¹	/b n	/6 т	l/g n	l∕g ⊔	l∕g μ	/6 n]/в п	/б п	/6 п	/6 n	/6 n
DISCHARGE	MONITOR MONITOR	5	5	2	2	5	10	0.7	5	2	2	2	5	20	20	2	20	20	10		20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHENE	1,2(CIS)-DICHLOROETHENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHENE	BENZENE	TETRACHLOROETHENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	TOTAL VOCs	PHENANTHRENE	FLUORENE	PYKENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, TOTAL CHROMILIM TOTAL

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

OCT 15 2002

Peter J. Gerbasi, P.E. Commissioner Nassau County Department of Public Works 1550 Franklin Avenue Mineola, NY 11501

Dear Commissioner Gerbasi:

The U.S. Environmental Protection Agency (EPA) is working to obtain updated and expanded potentiometric surface profiles of the groundwater impacted area encompassed by the Claremont Polychemical Corporation Superfund site, the Old Bethpage Landfill Superfund site and the Firemen Training Center site. EPA would like to obtain the necessary groundwater hydraulic and groundwater contaminant data for a better understanding of the regional groundwater flow and contaminant distribution in this area. This would involve a cooperative effort among several agencies and a mutual interest of all concerned to share the results of this effort.

The next sampling round for the Claremont Polychemical Site, which includes water level measurements and groundwater sampling at all Claremont on-site and off-site wells, is scheduled to be conducted on October 21, 2002. This sampling event will be performed by Science Applications International Corporation (SAIC) under direction of the U.S. Army Corps of Engineers (COE), pursuant to an EPA contract with the COE.

Telephone contacts with Mr. Michael Flaherty of your staff and Ms. Maria Jon of my staff, on October 4, 2002, indicated that the Nassau County Department of Public Works will provide assistance to EPA in obtaining synoptic water level measurements of the Firemen Training Center site monitoring wells on October 21, 2002. We are also coordinating this effort with the Town of Oyster Bay.

In addition, EPA is planning to conduct a water level measurement and collect a groundwater sample from the Nassau County monitoring well cluster BP-3A-C, and we hereby request access to this monitoring well. We would also like to obtain information regarding the Firemen Training Center site monitoring wells, such as construction details, well logs and recovery wells pumping rates. Please transmit this information to:

U.S. EPA Ms. Maria Jon, RPM 290 Broadway, 20th floor New York, NY 10007 Thank you in advance for your cooperation on this study. Should you have any questions, please have your staff contact Ms. Maria Jon at (212) 637-3967.

Sincerely yours,

John S. Malleck, Chief Eastern New York Section

cc: Michael Flaherty, NCDPW Carl Hoffman, NYSDEC Robert Alvey, EPA



SEP - 9 2002

September 4, 2002

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / July 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the July 2002 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. The only excedances for this period were for the inorganic manganese. This compound is naturally occurring at the site and the observed elevated levels are attributable to the operation of on-site recovery well RW-3. This well was operated to progress the recovery of floating product.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

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PJW:JNW:jb

Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation & Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC **JULY 2002**

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T	WEEK 1 07/02/02	WEEK 2 07/09/02	WEEK 3 07/16/02	WEEK 4 07/23/02	WEEK 5 07/29/02
FLOW, DAILY AVG	MONITOR	GPD	ΑΝ	753681	746272	1145172	1245667	1245443
VINXI CHIODIDE	MONIOR	GPD 'S'	NA 1	8/886/	749950	1263900	1275100	1262567
11 PICH OBOETHANE	o 4	1/6 n :	- ,	BOL	BDL BDI	BDL	BDL BDI	BDL BDI
1 2/TRANSI-DICHI OROETHENE	ט ע	1/6 ri		ם מ	ם מ	מקק	BDL	BDL PD
1.2(CIS)-DICHLOROETHENE	ט עמ) n =	- 6	<u> </u>	2 2	מ ה	<u> </u>	ם מ
1,1,1-TRICHLOROETHANE	5	/b = 1	5 7	BDI	BDI	BDI	80	200
TRICHLOROETHENE	10	 	1.7	BDL	BDL	BDL	BDI	BDI
BENZENE	0.7	l/б п	0.7	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	5	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
TOLUENE	2	l/в н	1.2	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	2	g/l	2.4	BDL	BDL	BDL	BDL	BDL
o-XYLENE	5	l/g n	1.3	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	2	l∕g μ	1.2	BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	/6 п	10.0	BDL	BDL	BDL	BDL	BDL
ACETONE	20	/6 п	10.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	7	/6 п	1.1	BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	20	l/в ц	6.0	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/g ₁₁	0.7	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	/в п	1.7	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs		μ g/l	0.0	0.0	0.0	0.0	0.0	0.0
PHENANTHRENE	20	l/в и	1.0	BDL	BDL	BDL	BDL	BDL
FLUORENE	20	/6 n	1.0	BDL	BDL	BDL	BDL	BDL
PYRENE	20	_ /в п	1.0	BDL	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	/6 п	1.0	BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l∕g ⊓	1.0	BDL	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	l/g 1	1.0	BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	50	l/g n	1.0	1.5	1.3	BDL	BDL	BDL
IRON, TOTAL	009	l/6 n	2.0	27.0	26.0	32.0	52.0	40.0
MANGANESE, TOTAL	009	l/g ¹	1.0	185.0	184.0	193.0	751.0	717.0
SUM IRON & MANGANESE	1000	l/g n	Ϋ́	212.0	210.0	225.0	803.0	757.0
NICKEL, TOTAL	2000	l/g ₁	5.0	5.0	0.9	5.0	4.0	5.0
ARSENIC, TOTAL	20	l/g ₁	48.0	13.0	BDL	BDL	BDL	BDL
ALUMINUM, TOTAL CHROMILIM TOTAL	2000	/6 z :	40.0 2.0	BDL	BDL	BDL	BDL	BDL
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AUG 19 2002

Bureau Of Buzzerous Site Control
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August 15, 2002

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / June 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the June 2002 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. There were no exceedances for this period.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb

Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation & Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

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ALUMINUM, TOTAL CHROMIUM, TOTAL	ARSENIC, TOTAL	NICKEL, TOTAL	SUM IRON & MANGANESE	MANGANESE, TOTAL	IRON, TOTAL	DIETHYL PHTHALATE	DIMETHYL PHTHALATE	DI-N-OCTYL PHTHALATE	BIS(2-ETHLHEXYL)PHTHALATE	PYRENE	FLUORENE	PHENANTHRENE	TOTAL VOCs	NAPHTHALENE	DIBROMOCHLOROMETHANE	DICHLOROBROMOMETHANE	CHLOROFORM	ACETONE	METHYL ETHYL KEYTONE	1,1-DICHLOROETHENE	o-XYLENE	m,p-XYLENE	TOLUENE	TETRACHLOROETHENE	BENZENE	TRICHLOROETHENE	1,1,1-TRICHLOROETHANE	1,2(CIS)-DICHLOROETHENE	1,2(TRANS)-DICHLOROETHENE	1,1-DICHLOROETHANE	VINYL CHLORIDE	FLOW, DAILY AVG FLOW, DAILY MAX	PARAMETER	EFFLUENT
2000 50	50	2000	1000	600	600	50	50	50	4.3	50	50	50		10	50	50	7	50	50	Οī	ζī	ъ	ΟΊ	ΟΊ	0.7	10	ъ	Οī	Ŋ	Ω	5	MONITOR	LIMITATIONS	DISCHARGE
μ 9/I μ 9/I	μ g/l	μg/l			μ g/l				μ g/l	μ g/l	μ g/l	μ g/l	μg/l	µ g/I	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μg/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	GPD		STINU
40.0 2.0	48.0	5.0	NA	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.7	0.7	0.9	1.1	10.0	10.0	1.2	1.3	2.4	1.2	1.2	0.7	1.7	1.4	1.0	1.1	1.1	<u>-1</u> -2	ZZ >>	MDL	COMP'T
BDL BDL	BDL	2.0	119.0	28.0	91.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	346000 348700	06/04/02	WEEK 1
BDL BDL	20.0	4.0	191.0	161.0	30.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	640257 899000	06/11/02	WEEK 2
BDL BDL	BDL	BDL	209.0	169.0	40.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BD(BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	884843 903200	06/18/02	WEEK 3
BDL BDL	20.0	4.0	207.0	163.0	44.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	877567	06/25/02	WEEK 4
			0.0										0.0																					WEEK 5



July 18, 2002

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / May 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the May 2002 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. There were no exceedances for this period.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb

Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation & Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

H:\Water Resources\Fireman's Training Center\2002 effluent monthly reports\DEC HOFFMAN MAY 02 TRANSMIT.wpd

MAY 2002

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMPIT	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
FIOW DAILY AVE	MONITOR	000	MDL	20/10/c0 500288	707767	305/14/02	05/21/02	05/28/02
FLOW, DAILY MAX	MONITOR	GPD	ΣZ	781700	730300	693300	356600	356700
VINYL CHLORIDE	5	∥⁄β π	1.1	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	l/g n	1.1	BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	l/g μ	1.1	BDL	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	2	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	2	l/g n	4.	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	l/g ų	1.7	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	l/g n	0.7	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	2	l/g π	1.2	BDL	BDL	BDL	BDL	BDL
TOLUENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	5	l/g n	2.4	BDL	BDL	BDL	BDL	BDL
o-XYLENE	5	l/g n	1.3	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	l∕g μ	10.0	BDL	BDL	BDL	BDL	BDL
ACETONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	7	l/g n	1.1	BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/g π	0.7	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	l/g π	1.7	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs		l∕g μ	0.0	0.0	0.0	0.0	0.0	
PHENANTHRENE	20	l/β π	1.0	BDL	BDL	BDL	BDL	BDL
FLUORENE	20	l∕g ₁	1.0	BDL	BDL	BDL	BDL	BDL
PYRENE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g μ	1.0	BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l/g μ	1.0	BDL	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	l/β π	1.0	BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	50	l/g μ	1.0	BDL	BDL	BDL	BDL	BDL
IRON, TOTAL	009	l/g μ	2.0	30.0	25.0	32.0	33.0	46.0
MANGANESE, TOTAL	009	l/g μ	1.0	244.0	235.0	29.0	30.0	23.0
SUM IRON & MANGANESE	1000	l/g ₁	Υ V	274.0	260.0	61.0	63.0	0.69
NICKEL, TOTAL	2000	l/g n	2.0	0.9	5.0	3.0	2.0	3.0
ARSENIC, TOTAL	20	l/g μ	48.0	BDL	BDL	13.0	BDL	12.0
ALUMINUM, TOTAL CHROMIUM, TOTAI	2000	/6 л /о	40.0	BDL BJ	BDL	BDL	BDL	BDL
		r g	2	7	1	טטר	UDL	DDL

THOMAS R. SUOZZI COUNTY EXECUTIVE



PETER J. GERBASI, P.E. COMMISSIONER

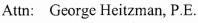
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REMEDIAL ACTION

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

June 13, 2002

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233-7015



Sanitary Engineer

Re: Annual Environmental Monitoring Report - June, 2000

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find enclosed one (1) copy of the Annual Environmental Monitoring Report - June, 2000 for the Nassau County Fireman's Training Center. This report summarizes all environmental monitoring and treatment activities for the first year of plant operation.

Should you have any questions or comments on this report, please feel free to contact me at (516) 571-6970.

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:MF:jb

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply







May 28, 2002

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / January - March 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the April 2002 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. Please note that the excedances to our discharge criteria for these months were for the inorganics manganese and iron. These compounds are naturally occurring at the site and the observed elevated levels are attributable to the operation of on-site recovery well RW-3. This well was operated to progress the recovery of floating product, the recovery of floating product has subsequently diminished at the RW-3 location and the well was secured as of April 19, 2002.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb

Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation & Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

APRIL 2002

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

PARAMETER	LIMITATIONS	STINO	MDL	04/01/02	WEEK 2 04/08/02	WEEK 3 04/16/02	WEEK 4 04/23/02	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR MONITOR	GPD GPD	N N	777633 798800	770014 779100	755250 776600	738314 784267	
VINYL CHLORIDE	טז טז) 1,6 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5	<u> </u>	BD_	BDL BDL	B B E	BDL	
1,2(TRANS)-DICHLOROETHENE	5	۳ <u>۱</u>	<u>-</u>	BDL ?	BD 5	BDL 2	BDL 108	
1,2(CIS)-DICHLOROETHENE	5	μ g/l	1.0	BDL	BDL	BDL	BDL	
1, 1, 1- I RICHLOROE I HANE	10 5	- 7 9 1	1.4 1.7	B B D	8 B	3 B	2 BD	
BENZENE	0.7	۳ <u>۵</u> /	0.7	BDL	BD (BDL	BDL	
TETRACHLOROETHENE	5	1/g/I	1.2	BDL	BDL	BDL	BDL	
TOLUENE	5	μ g/l	1.2	BDL	BDL	BDL	BDL	
m,p-XYLENE	5ī	μ g/l	2,4	BDL	BDL	BDL	BDL	
o-XYLENE	ı (J	μ g/l	<u>1</u> .ω	BDL	BDL	BDL	BDL	
METHYL ETHYL KEYTONE	50 o	1,0	10.0	BD 60	8 5	3 5	B E	
ACETONE	50	μ g/l	10.0	BDL	BDL	BDL	BDL	
CHLOROFORM	7	μg/l	<u>-1</u>	BDL	BDL	BDL	BDL	
DICHLOROBROMOMETHANE	50	μ g/l	0.9	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	50	μ g/l	0.7	BDL	BDL	BDL	BDL	
NAPHTHALENE	10	μ <u>9</u> /	1.7	BDL	BDL	BDL	BDL	
PHENANTHRENE	50	2 <u>4</u>	100			20.5	<u> </u>	
FLUORENE	50	1,0 H	1.0	BD.	BD 5	BD F	BDL C	
PYRENE	50	μ g/l	1.0	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	μ g/l	1.0	BDL	BDL	BDL	BDL	
DI-N-OCTYL PHTHALATE	50	μ g/l	1.0	BDL	BDL	BDL	BDL	
DIMETHYL PHTHALATE	50	- F 9 19 19	1.0	B D	BDL	B B	<u> </u>	
IRON, TOTAL	600	μ g/l	2.0	19.0	31.0	15.0	24.0	
MANGANESE, TOTAL	600	1/g ¹ /	1.0	1410.0	1370.0	1430.0	259.0	
SUM IRON & MANGANESE	1000		Ā	1429.0	1401.0	1445.0	283.0	
NICKEL, TOTAL	2000		5.0	4.0	2.0	5.0	4.0	
ARSENIC, TOTAL	50		48.0	BDL	BDL	BDL	BDL	
CHROMILIM TOTAL	2000	1,0/	40.0 20	B 10.0	B B	B B P	B B	
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Bureau G. Hazardhus



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

May 1, 2002



Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report / January - March 2002

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Please find attached the January, February, and March 2002 Monthly Effluent Monitoring Reports for the groundwater remediation at the Fireman's Training Center site in Old Bethpage, New York. Please note that the excedances to our discharge criteria for these months were for the inorganics manganese and iron. These compounds are naturally occurring at the site and the observed elevated levels are attributable to the operation of on-site recovery well RW-3. This well was operated to progress the recovery of floating product, the recovery of floating product has subsequently diminished at the RW-3 location and the well was secured as of April 19, 2002.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb

Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation & Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

JANUARY 2002

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 01/02/02	WEEK 2 01/08/02	WEEK 3 01/15/02	WEEK 4 01/22/02	WEEK 5 01/30/02
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	4 4 Z Z	624250 624250	534633 589200	547257 624800	605629 613200	507387
VINYL CHLORIDE	2	l/g ц	1.1	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	2	l/в ц	-	BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	l/g ц	1 .	BDL	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	2	l/g ц	1.0	BDL	BDL	BDL	5.8	7.7
1,1,1-TRICHLOROETHANE	2	l/в ц	1.4	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	l∕g ₁	1.7	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	l∕g ಗ	0.7	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	2	l/в п	1.2	BDL	BDL	BDL	BDL	BDL
TOLUENE	2	l/g μ	1.2	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	2	l/g n	2.4	BDL	BDL	BDL	BDL	BDL
o-XYLENE	5	l∕g ₁	1.3	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	2	l/g n	1.2	BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	BDL
ACETONE	20	l/g ц	10.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM		l/g π	1.	BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	20	l/g ц	6.0	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/g ц	0.7	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	l/g μ	1.7	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs		l/g μ	0.0	0.0	0.0	0.0	0.0	0.0
PHENANTHRENE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
FLUORENE	20	l∕g n	1.0	BDL	BDL	BDL	BDL	BDL
PYRENE	20	l∕g ₁	1.0	BDL	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g ₁	1.0	BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l∕g μ	1.0	BDL	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	50	l/g μ	1.0	BDL	BDL	BDL	BDL	BDL
RON, TOTAL	009	l/g π	2.0	0.99	87.0	63.0	63.0	49.0
MANGANESE, TOTAL	009	l/g μ	1.0	2070.0	1890.0	1870.0	1990.0	2030.0
SUM IRON & MANGANESE	1000	l/g μ	∢ Z	2136.0	1977.0	1933.0	2053.0	2079.0
NICKEL, TOTAL	2000	l/g 1	5.0	4.0	4.0	4.0	4.0	3.0
ARSENIC, TOTAL	20	/в п	48.0	BDL	BDL	BDL	BDL	BDL
ALUMINUM, TOTAL CHROMILIM, TOTAI	2000	д /в /о	40.0	BDL	80F	<u>8</u> 0	BDL	BDL
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NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

FEBRUARY 2002

PARAMETER	DISCHARGE	UNITS	COMP'T	WEEK 1 02/05/02	WEEK 2 02/11/02	WEEK 3 02/19/02	WEEK 4 02/26/02	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A X	603033 609900	573567 598200	452550 506600	392700 458700	
VINYL CHLORIDE	5	l/g μ	1.1	BDL	BDL	BDL	BDL	
I,1-DICHLOROETHANE	2	l/g n	1.1	BDL	BDL	BDL	BDL	
,2(TRANS)-DICHLOROETHENE	2	/6 п	1.1	BDL	BDL	BDL	BDL	
,2(CIS)-DICHLOROETHENE	വ	l/g n	1.0	BDL	BDL	BDL	5.8	
I,1,1-TRICHLOROETHANE	2	l/g n	4.1	BDL	BDL	BDL	BDL	
TRICHLOROETHENE	10	l/g n	1.7	BDL	BDL	BDL	BDL	
	0.7	l/g n	0.7	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	5	l/g n	1.2	BDL	BDL	BDL	BDL	
	5	l/g n	1.2	BDL	BDL	BDL	BDL	
m,p-XYLENE	2	l/g n	2.4	BDL	BDL	BDL	BDL	
	5	l/g u	1.3	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHENE	5	l/g u	1.2	BDL	BDL	BDL	BDL	
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	
	20	l/g n	10.0	BDL	BDL	BDL	BDL	
CHLOROFORM	7	l/g n	1.1	BDL	BDL	BDL	BDL	
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	20	l/g n	0.7	BDL	BDL	BDL	BDL	
NAPHTHALENE	10	l/g n	1.7	BDL	BDL	BDL	BDL	
TOTAL VOCs		l/g μ	0.0	0.0	0.0	0.0	0.0	
PHENANTHRENE	20	l/g μ	1.0	BDL	BDL	BDL	BDL	
	20	l/g n	1.0	BDL	BDL	BDL	BDL	
	20	l/g μ	1.0	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g n	1.0	BDL	BDL	BDL	BDL	
DI-N-OCTYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDL	
DIMETHYL PHTHALATE	20	l∕g μ	1.0	BDL	BDL	BDL	BDL	
DIETHYL PHTHALATE	50	l/g μ	1.0	BDL	BDL	BDL	BDL	
IRON, TOTAL	009	l/g μ	2.0	50.0	46.0	47.0	52.0	
MANGANESE, TOTAL	009	l/g μ	1.0	2020.0	2700.0	2750.0	2890.0	
SUM IRON & MANGANESE	1000	l∕g ₁	ΑĀ	2070.0	2746.0	2797.0	2942.0	
NICKEL, TOTAL	2000	l∕g ₁	5.0	2.0	1.0	BDL	BDL	
ARSENIC, TOTAL	20	l∕g n	48.0	BDL	62.0	114.0	BDL	
ALUMINUM, TOTAL	2000	ľб п	40.0	BDL	BDL	BDL	BDL	
CHROMIUM, TOTAL	50	μ g/l	2.0	BDL	1.0	4.0	В	יטר

MARCH 2002

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT	DISCHARGE	UNITS	COMP'T	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
PAKAMEIEK	LIMITATIONS		MDL	03/05/02	03/12/02	03/19/02	03/26/02	
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD	A A	339186	416743	471343		
VINYL CHLORIDE	5	l/g μ	1.1	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHANE	5	l/g n	1.1	BDL	BDL	BDL	BDL	
1,2(TRANS)-DICHLOROETHENE	5	l/g n	1.1	BDL	BDL	BDL	BDL	
1,2(CIS)-DICHLOROETHENE	5	l/g n	1.0	BDL	BDL	BDL	5.8	
1,1,1-TRICHLOROETHANE	5	l/g n	1.4	BDL	BDL	BDL	BDL	
TRICHLOROETHENE	10	l/b n	1.7	BDL	BDL	BDL	BDL	
BENZENE	0.7	/6 n	0.7	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	5	l/g n	1.2	BDL	BDL	BDL	BDL	
TOLUENE	5	l/g n	1.2	BDL	BDL	BDL	BDL	
m,p-XYLENE	2	∥р п	2.4	BDL	BDL	BDL	BDL	
o-XYLENE	5	l/в ц	6.1	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHENE	5	l/в ц	1.2	BDL	BDL	BDL	BDL	
METHYL ETHYL KEYTONE	20	l/в ц	10.0	BDL	BDL	BDL	BDL	
ACETONE	20	/6 n	10.0	BDL	BDL	BDL	BDL	
CHLOROFORM		l/g 1/	1.1	BDL	BDL	BDL	BDL	
DICHLOROBROMOMETHANE	20	/6 n	6.0	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	20	l/в ц	0.7	BDL	BDL	BDL	BDL	
NAPHTHALENE	10	l/g n	1.7	BDL	BDL	BDL	BDL	
TOTAL VOCs		l/в п	0.0	0.0	0.0	0.0	0.0	
PHENANTHRENE	20	l/в ц	1.0	BDL	BDL	BDL	BDL	
FLUORENE	20	l/6 n	1.0	BDL	BDL	BDL	BDL	
PYRENE	20	l/в н	1.0	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	/в н	1.0	BDL	BDL	BDL	BDL	
DI-N-OCTYL PHTHALATE	20	b д/	1.0	BDL	BDL	BDL	BDL	
DIMETHYL PHTHALATE	20	l/g 1/	1.0	BDL	BDL	BDL	BDL	
DIETHYL PHTHALATE	50	g/l	1.0	BDL	BDL	BDL	BDL	
IRON, TOTAL	009	l/в ц	2.0	42.0	48.0	62.0	42.0	
MANGANESE, TOTAL	009	l/в ц	1.0	3120.0	1990.0	1440.0	1920.0	
SUM IRON & MANGANESE	1000	/6 n	ΑA	3162.0	2038.0	1502.0	1962.0	
NICKEL, TOTAL	2000	/6 n	5.0	3.0	3.0	11.0	3.0	
ARSENIC, TOTAL	20	/6 н	48.0	BDL	BDL	144.0	BDL	
ALUMINUM, TOTAL	2000	l/g n	40.0	BDL	BDL	BDL	BDL	
CHRUMIUM, I O I AL	റ്റ	l/g n	2.0	BDL	BDL	0.9	BDL	

MARCH 2002

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 03/05/02	WEEK 2 03/12/02	wеек з 03/19/02	WEEK 4 03/26/02	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A N A	339186 346100	416743 474000	471343 495000		
VINYL CHLORIDE	2	l/g n	1.1	BDL	BDL	BDL		
1,1-DICHLOROETHANE	2	l/g n	1.1	BDL	BDL	BDL		
1,2(TRANS)-DICHLOROETHENE	5	l/в п	1 .	BDL	BDL	BDL		
1,2(CIS)-DICHLOROETHENE	S.	l/6 n	1.0	BDL	BDL	BDL		
1,1,1-TRICHLOROETHANE	2	l/g n	4.1	BDL	BDL	BDL		
TRICHLOROETHENE	10	l/g n	1.7	BDL	BDL	BDL	_	
BENZENE	0.7	l/g n	0.7	BDL	BDL	BDL		
TETRACHLOROETHENE	2	l/g n	1.2	BDL	BDL	BDL		
TOLUENE	ည	l/g n	1.2	BDL	BDL	BDL		
m,p-XYLENE	ည	l/g n	2.4	BDL	BDL	BDL		
o-XYLENE	5	/b 11	1 .3	BDL	BDL	BDL		
1,1-DICHLOROETHENE	5	l/g n	1.2	BDL	BDL	BDL		
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL	BDL		
ACETONE	20	l/g n	10.0	BDL	BDL	BDL		
CHLOROFORM	7	l/g n	1.1	BDL	BDL	BDL		
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL		
DIBROMOCHLOROMETHANE	20	l/g 1	0.7	BDL	BDL	BDL		
NAPHTHALENE	10	l/g n	1.7	BDL	BDL	BDL		
TOTAL VOCs		l/g n	0.0	0.0	0.0	0.0		
PHENANTHRENE	20	l/в и	1.0	BDL	BDL	BDL		
FLUORENE	20	l/g 1	1.0	BDL	BDL	BDL		
PYRENE	20	l/g n	1.0	BDL	BDL	BDL		
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g 1	1.0	BDL	BDL	BDL		
DI-N-OCTYL PHTHALATE	20	l/g 1	1.0	BDL	BDL	BDL		
DIMETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL		
DIETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL		
IRON, TOTAL	009	l/g μ	2.0	42.0	48.0	62.0		
MANGANESE, TOTAL	009	l/g 1	1.0	3120.0	1990.0	1440.0	`	
SUM IRON & MANGANESE	1000	l/g n	Ϋ́	3162.0	2038.0	1502.0	`	
NICKEL, TOTAL	2000	l/g 1	5.0	3.0	3.0	11.0		
ARSENIC, TOTAL	20	l/g n	48.0	BDL	BDL	144.0		
ALUMINUM, TOTAL	2000	/6 1	40.0	8D 1	뮵	BDL	B 6	
UINUM, IUIAL	3	ויאָ אַ	7.7	חטר	פער	٥.٥		

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

FEBRUARY 2002

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JANUARY 2002

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

LIMITATIONS
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COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

FEB - 5 2002

January 31, 2002

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, 11th Floor 625 Broadway Albany, NY 12233-7014

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Reports

Nassau County Fireman's Training Center, Site #1-30-042

Gentlemen:

Attached are the November 2001 and December 2001 Monthly Effluent Monitoring Reports for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. The only exceedences of the discharge limitations were for manganese.

If you have any questions concerning the monthly reports, please contact me at (516) 571-6970.

Very truly yours,

Peter I Witkowski

Director of Hazardous Waste Services

PJW:JNW:jb Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

NOVEMBER 2001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T	WEEK 1 11/05/01	WEEK 2 11/13/01	WEEK 3 11/20/01	WEEK 4 11/27/01	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A A	789340 796400	784900 795800	786728 794900	780757 784600	
VINYL CHLORIDE	2	l/β π	1.1	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHANE	ر د	ľg n	Ξ:	BDL	BDL	BDL	BDL	
1,2(TRANS)-DICHLOROETHENE	ı,	/6 п	 ;	BDL	BDL	BDL	BDL	
1,2(CIS)-DICHLOROETHENE	Ωı	л Б	0. ,	BDL 80.	BDL	BDL	BDL	
1,1,1-I KICHLOKOE I HANE	ç ;	/б п	4. 1	BDL	BDL	BDL	BDL	
- KICHLOKOE I HENE BENJENE	10	/6 n	1.7	BDL BD.	BDL	BDL	BDL	
DENZENE TETBACHI OBOETHENE). u	Б Б т :	7.0	מק מי	מי	BDL BD	BDL	
TOLUENE	2	/6 n		BD1	8D R	8D L	8D E	
m,p-XYLENE	5	, n	2.4	BDL	BDL	BDL	BDI	
o-XYLENE	5	,b . n	1.3	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHENE	5	/6 n	1.2	BDL	BDL	BDL	BDL	
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	
ACETONE	20	/b n	10.0	BDL	BDL	BDL	BDL	
CHLOROFORM	7	l/g n	1.	BDL	BDL	BDL	BDL	
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	20	l/g n	0.7	BDL	BDL	BDL	BDL	
NAPHTHALENE	10	l/g 4	1.7	BDL	BDL	BDL	BDL	
TOTAL VOCs		µ g/I	0.0	BDL	BDL	0.0	BDL	
PHENANTHRENE	20	/в п	1.0	BDL	BDL	BDL	BDL	
FLUORENE	20	l/6 ri	1.0	BDL	BDL	BDL	BDL	
PYRENE	20	/6 n	1.0	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g n	1.0	BDL	BDL	BDL	BDL	
DI-N-OCTYL PHTHALATE	20	l∕g π	1.0	BDL	BDL	BDL	BDL	
DIMETHYL PHTHALATE	20	/b n	1.0	BDL	BDL	BDL	BDL	
DIETHYL PHTHALATE	20	l/g π	1.0	BDL	BDL	BDL	BDL	
IRON, TOTAL	009	l/g n	2.0	62.00	71.00	110.0	43.0	
MANGANESE, TOTAL	009	l/g л	1.0	1220.0	1180.0	1290.0	1210.0	
SUM IRON & MANGANESE	1000	l/g n	Α	1282.0	1251.0	1400.0	1253.0	0.0
NICKEL, TOTAL	2000	l/g ii	5.0	4.0	3.0	4.0	3.0	
ARSENIC, TOTAL	20	l∕g n	48.0	BDL	BDL	BDL	BDL	
ALUMINUM, TOTAL CHROMILIM TOTAL	2000	/6 n :	40.0	80L	BDL	BDL	BDL	
	3	Ď.	7.0	DOL	BUL	DDL	DDL	

DECEMBER 2001 NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

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EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 12/03/01	WEEK 2 12/11/01	WEEK 3 12/17/01	WEEK 4 12/26/01	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR MONITOR	GPD GPD	A A	786467 789700	773750 777000	736467 787200	615456 769400	
VINYL CHLORIDE	5	l/β π	. .	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHENE 1,2(TRANS)-DICHLOROETHENE	ດທ	1/6 n		BDL	80F	80L	BDL BDI	
1,2(CIS)-DICHLOROETHENE	വ	l/g n	1.0	BDL	BDL		1 1 1 1 1	
1,1,1-TRICHLOROETHANE	Ω.	l/g n	4.1	BDL	BDL	BDL	BDL	
TRICHLOROETHENE RENZENE	10	/6 π	7. 1	BDL	BDL	BDL	BDL	
DENZENE TETRACHLOROETHENE	5.	1/6 n	1.2	BDI	80 E	BDL BDI	80F	
TOLUENE	2	l/g n	1.2	BDL	BOL	12 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	BDL	
m,p-XYLENE	2	l/в п	2.4	BDL	BDL	BDL	BDL	
o-XYLENE	2	l/g n	1.3	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHENE	2	/6 π	1.2	BDL	BDL	BDL	BDL	
METHYL ETHYL KEYTONE	20	l/g π	10.0	BDL	BDL	BDL	BDL	
ACETONE	20]/б п	10.0	BDL	BDL	BDL	BDL	
CHLOROPORIM	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \]/б п	. (BDL	BDL	BDL	BDL	
DICHLOROBROMOME HANE	000	ј/6 п	6.0 E	BDL	BDL	BDL	BDL	
DIBROMOCHLOROME I HANE	20]/б п	0.7	BDL	BDL	BDL	BDL	
TOTAL VOCs	2	л :	\ \ \	BDL BDI	BDL	BDL	BD 1	
PHENANTHRENE	50) d d	10.0	BDI.	BDI.	0.0	PDL PDL	
FLUORENE	20) 1. =	5 6	RDI I	2 2	ק ק	ק ק	
PYRENE	50	l/b n	0.1	BDL	BDL	BDI	25	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	/б п	1.0	BDL	BDL	BDL	BDL	
DI-N-OCTYL PHTHALATE	20	/6 п	1.0	BDL	BDL	BDL	BDL	
DIMETHYL PHTHALATE	20	/6 п	1.0	BDL	BDL	BDL	BDL	
DIETHYL PHTHALATE	50	/в _п	1.0	BDL	BDL	BDL	BDL	
IRON, TOTAL	009	l/в и	2.0	39.00	106.00	98.0	0.06	
MANGANESE, TOTAL	009	/6 п	1.0	1220.0	1650.0	1990.0	1990.0	
SUM IRON & MANGANESE	1000	/6 п	Ϋ́	1259.0	1756.0	2088.0	2080.0	0.0
NICKEL, TOTAL	2000	l/g n	5.0	3.0	3.0	3.0	3.0	
ARSENIC, TOTAL	20	/6 п	48.0	BDL	BDL	BDL	BDL	
ALUMINUM, TOTAL CHROM!! IM TOTA!	2000	/6 т	40.0	BDL	BDL	BDL	BDL	
טוויייין, וסוגר	200	1/6 rl	2.0	DUL	BUL	BUL	BDL	

New York State Department of Environmental Conservation

Division of Environmental Remediation

Bureau of Hazardous Site Control, 11th Floor 625 Broadway, Albany, New York 12233-7014

Phone: (518) 402-9564 • FAX: (518) 402-9022

Website: www.dec.state.ny.us

December 21, 2001

Erin M. Crotty Commissioner

Mr. Thomas Lyons
Director, Environmental Management Bureau
NYS Office of Parks Recreation and Historic Preservation
Agency Bldg. 1
Empire State Plaza
Albany, NY 12238

Dear Mr. Lyons:

Re: Nassau County Fire Training Center (Site Code #130042)

As you requested, I have compiled the monthly laboratory data that has been submitted for the groundwater treatment plant at the Nassau County Fire Training Center. The monthly reports cover the operational period from August 1999 through November 2001.

The laboratory results indicate the groundwater treatment plant consistently removes organic contaminates to below method detection limits (BDL). Inorganic parameters typically detected in the effluent includes iron and manganese, which occasionally exceed discharge limitations. The effluent is tested weekly and the effluent is of consistent high quality. The influent to the treatment plant is from groundwater extraction wells, and not from a sanitary wastewater origin that would contain pathogens.

Reuse of this water to irrigate the adjacent Old Bethpage State Park golf course would be mutually beneficial to allow the treatment plant to dispose of the effluent, while productively reusing the water for golf course irrigation. The Port Washington Landfill, operated by the Town of North Hempstead, currently uses the effluent from their treatment plant to irrigate the adjacent golf course.

I have copied Ms. Jacquelyn Nealon, of the New York State Department of Health, for her review as you requested.

If you have any questions, or if I can be of further assistance to you, feel free to contact me at 402-9564, or by e-mail at crhoffma@gw.dec.state.ny.us.

Sincerely.

Carl Hoffman P

Environmental Engineer 2 Western Investigation Section

Bureau of Hazardous Site Control

cc: with enclosure Jacquelyn Nealon NYSDOH

Bcc with enclosure Walter Parish Region 1 Bcc without enclosure T. Reamon, G. Rider

New York State Department of Environmental Conservation

Division of Environmental Remediation

Bureau of Hazardous Site Control, 11th Floor 625 Broadway, Albany, New York 12233-7014

Phone: (518) 402-9564 • FAX: (518) 402-9022

Website: www.dec.state.ny.us

Erin M. Crotty Commissioner

October 16, 2001

Peter J. Wikowski Director of Hazardous Waste Services County of Nassau Department of Public Works Mineola, New York 11501-4822

Dear Mr. Witkowski:

Re: Plate and Frame Filter Press Test (site code #130042)

I am responding to your letter of September 21, 2001, regarding the County not having accepted the plate and frame filter press at the Nassau County Fireman's Training Center (FTC) due to a question of the units performance. The manufacturer and contractor have asserted that the problem is related to the nature of the sludge, and not their press. The solution that you have proposed is to run a test batch of iron sludge, which is known to de-water well from the Purex - Mitchell Field site on the FTC press. If that sludge performs well on the press, the County will accept the press.

Knowing that sludge de-watering characteristics can vary widely from past municipal wastewater treatment experience, I agree that your proposed pilot test of 2,000 gallons is a conclusive way to determine whether the problem is related to the press or the sludge.

My understanding is that the iron sludge is non-hazardous, and I concur with your request to perform the test provided that you document that the Purex iron sludge is not a hazardous material prior to transporting it.

I am anxious to learn the results of you pilot test, and in the meantime, if you have any questions, please feel free to contact me at (518) 402-9564.

Sincerely,

Carl Hoffman P.E.

Environmental Engineer 2
Western Investigation Section
Bureau of Hazardous Site Control

bcc:

T. Reamon

G. Rider

C. Hoffman



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

September 21, 2001

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Filter Press Test

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

As we discussed several months ago, the County has yet to accept the plate and frame filter press at the Fireman's Training Center site due to its inability to produce a consistent dry cake, as per the unit's specifications. The contractor has had the manufacturer out to the site several times to make adjustments, and has sent samples of our iron sludge to the manufacturer's laboratory for testing. Both the manufacturer and the contractor now contend that the problem with the filter press in not meeting the dry cake specification is a site water chemistry issue, not mechanical, and being so, the County should accept the filter press. However, the County is still not convinced that the problem is not mechanical.

As you know, the Purex site in Mitchel Field also uses a plate and frame filter press to dewater their iron sludge, and has had no problems for the past ten years in producing a consistent dry cake. In order to settle the FTC's filter press performance issue, it has been suggested that a sufficient quantity of Purex site sludge be transported to the FTC site for dewatering. If a satisfactory dry cake can be produced with the Purex sludge, the County will accept the FTC filter press.

Before making the arrangements to transport the approximately 2,000 gallons of Purex site sludge to the FTC site, the County is seeking your concurrence with the proposed test and, if you concur, is requesting your approval to move sludge between the two sites.

If you have any questions concerning the above request, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Frank A. Scicchitano, Director of Environmental Construction Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants

File Ang OI

From: To: John Swartwout Reamon, Thomas

Subject:

Fwd: Nassau County Fire Training Center site #130042

Jim says that (if you concur with the County), no ROD amendment is needed since ending a deed restriction based on a technical determination that the restriction is no longer necessary would not constitute a fundamental change to the selected remedy. I would go one step further and categorize this change as "minor" as defined in TAGM 4059. This requires a memo to be prepared by the project manager, approved by his supervisor, and placed in the file. In the future I think we should consider the ending of deed restrictions under such circumstances as not being a change in the selected remedy at all but simply a part of the normal implementation of the remedy. It would be documented, however, much the same as is required in the TAGM for minor changes in the remedy.

CC:

Marino, Robert

From:

James Eckl

To:

Reamon, Thomas

Date:

8/8/01 12:18PM

Subject:

Nassau County Fire Training Center site #130042

Wednesday 08/08/01 @ 1218

Tom Reamon

This replies to the memo dated 08/07/01 from you to me [#38344] re the captioned site.

Preliminarily: I believe its misleading to think of a Record Of Decision as requiring anything; a Record Of Decision is no more than a memorialization of the Dep't's remedy-selection process and doesnt by itself impose any requirements; requirements are imposed by an order: if a responsible party has entered into a consent order whereby it has undertaken to implement the remedy selected by the Dep't, although the Record Of Decision defines the work to be done, the requirement to perform that work is imposed by the order. In the instant case, the Record Of Decision was issued 02/26/93 and modified 08/02/94: in the description of the selected remedy, for shallow soils [down to five feet below grade], it is said, "Capping shallow soils, combined with deed restrictions on the FTC property, will prevent future human exposure to site contaminants, and will minimize the future release of contaminants to groundwater. ... Nassau County will be required to record a Notice of Covenants and Restrictions on the property deed, subject to DEC and DOH approval, that will require notification and approval of any activity that could potentially result in disturbance of or contact with contaminated soils or any change in the use of the site."

That being said ...

Your memo raises several distinct but related questions: however, they are questions that need to be answered only if you accept the accuracy of the contention in the 07/18/01 Peter Witkowski to Carl Hoffman letter that "natural aeration of the vadose zone beneath the Fireman's Training Center has provided enough oxygen to maintain biological activity; thus, causing the breakdown of the volatile and semi-volatile organic compounds which were previously identified in the 1986 and 1994 soil sampling events. This most recent sampling event has demonstrated that the site's three designated soil contamination areas consistently show levels of contamination below the NYSDEC's TAGM 4046". If you disagree and think the shallow soil is still contaminated to the point that it constitutes a hazard, we need not proceed further with this. If you agree and think the shallow soil is no longer contaminated and does not constitute a hazard, then we must proceed to consider your questions which are as follow:

- * the first question is whether the County's concerns, that the continuing existence of the deed restrictions would hamper its use of the property, are justified
 - * the second question is how a deed restriction may be removed
- * the third question is how else the County's concerns might be addressed so as to avoid reopening the Record Of Decision

As to the first question, any deed restriction by definition is a limitation on the use which a landowner may make of its own property and if we are satisfied that the continuation of a deed restriction is no longer necessary to protect against a hazard which has ceased to exist, I believe that it would be inappropriate for us to insist that the landowner must demonstrate a justification for wanting the deed restriction removed.

As to the second question, how this particular deed restriction may be removed may depend on its terms, and I will need to review a copy of whatever it is that was filed: surely the County can provide that.

And as to the third question, if the County is entitled to a removal of the deed restriction, the only way of giving it what it is entitled to is by removing the deed restriction; which is the second question.

So: its up to you to decide whether you accept or reject the contention in the 07/18/01 letter; if you reject it, thats the end of the inquiry; if you accept it, i.e. if you are convinced the shallow soil is no longer contaminated and does not constitute a hazard, such that the continuation of a deed restriction is no longer necessary because the hazard it was intended to guard against has since ceased to exist, then I believe there is no other conclusion but that the County is entitled to a removal of the deed restriction, whereupon it will be up to me to try to figure out a way of getting the deed restriction removed, for which purpose I will need to review a copy of what is now on the record. And I note, an amendment of the Record Of Decision wouldnt be indicated in the event of a determination that a deed restriction could be removed: plz refer to Program Policy DER-2 / TAGM #4059 (05/04/98) Making Changes to Selected Remedies: a fundamental change may be accomplished only by an amendment to the Record Of Decision; a significant change may be accomplished by an Explanation Of Significant Differences without an amendment to the Record Of Decision; and a minor change may be accomplished without any documentation other than an internal memo for the file.

Jim Eckl

CC: Marino, Robert; Swartwout, John

8 Aug 01

From:

John Swartwout

To:

Eckl. James

Subject:

Deed Restrictions at Nassau County Fireman's Training Center

Jim-

This is to give you a few of my own thoughts related to Tom Reamon's August 7 memo to you on this subject. Even though I doubt that any RODs requiring deed restrictions say anything about when or if the restrictions can be removed in the future, RODs should not have to be reopend or amended to remove the restrictions at a later date so long as the removal is justified technically and the Department concurs. EPA guidance indicates that deed restrictions should remain in place for so long as they are needed to restrict the use of a site in order to protect human health. There is no reason to keep them in place once that point has been passed. Keeping unneeded deed restrictions in place would place an unnessessary burden on both the property owner and DEC so we need to encourage periodic review of the continued need for all deed restrictions. Since this is an issue which in the future will no doubt be dealt with routinely by those assigned to the O&M phase of work on sites, guidance needs to be developed on how to remove deed restrictions once it has been determined that unrestricted use has become acceptable at a site.

CC:

Hoffman, Carl; Marino, Robert; Reamon, Thomas; Rider, Jerry

New York State Department of Environmental Conservation

Division of Environmental Remediation

Bureau of Hazardous Site Control, 11th Floor 625 Broadway, Albany, New York 12233-7014

Phone: (518) 402-9564 FAX: (518)402-9022



MEMORANDUM

TO: Jim Eckl, Division of Environmental Enforcement

FROM: Thomas Reamon, Western Investigation Section

SUBJECT: Deed Restrictions at Nassau County Fireman's Training Center, Site Code #130042

DATE: AUG -7 2001

Peter Witkowski, of Nassau County sent in the attached letter report to Carl Hoffman of my staff, requesting concurrence that deed restrictions can now be removed from contaminated soil areas identified within the Fireman's Training Center Record of Decision (ROD). The letter report includes recent sampling results showing natural attenuation of the contaminated soils to below TAGM 4046 levels since the ROD was issued.

A follow-up telephone conversation between Carl and Peter Witkowski, indicates that the County always plans to keep this property for fire training purposes. Peter indicated that there is a large demand from a wide area of volunteer fire companies for this training, and the location adjacent to the Old Bethpage Landfill makes it an ideal fire training location, that incidently is suitable for little else. Peter further explained to Carl that the reason why the County would like to have the deed restriction removed is a perception that it would hamper their use of the property. The example given was a concern that the County could be legally restricted from installing, or repairing a water main in the deed restricted areas without first receiving special authorization to work in these areas.

The question that arises in this situation is how would a deed restriction, that was mandated by a ROD be legally removed, or modified, if we did agreed? As a practical matter in this situation, are the County's concerns justified, and if so, are there any alternate mechanisms that might alleviate the County's concerns without formally reopening the ROD?

This is the first instance we have encountered to my knowledge, where it has been requested that a ROD mandated deed restriction be removed based upon subsequent sampling, and your thoughts on this issue will be appreciated.

If you have any questions, or need additional site information, please contact Carl Hoffman of my staff, at 2-9564.

cc: R. Marino

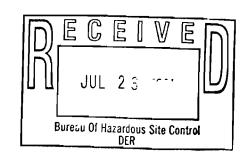
T. Reamon

C. Hoffman

Attachment



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822



July 18, 2001

Mr. Carl Hoffman New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Re: Deed Restrictions - Soil Quality Testing at Former Burn Areas Nassau County Fireman's Training Center, Site #1-30-042

Dear Mr. Hoffman:

As I informed you several weeks ago, the Nassau County Department of Public Works (NCDPW), Water Resources Unit would be collecting soil samples at the Fireman's Training Center (FTC) site to monitor changes in the level of contamination relative to past sampling events. The site's contaminated soil areas were established in the FTC's Record of Decision (ROD), dated February 26, 1993. These areas are described below, in detail. All locations, the sampling, and analytical testing methods for this field work followed the site's State approved Remediation Monitoring Plan, dated September 1994. The following is a summary of the work and our findings.

Three former Burn Areas at the FTC were designated contaminated soil areas in the site's ROD. These areas are identified as the Mock-Up Field (MUF), Corrugated Metal Building Field (CMB), and the Burn Area Field (BAF), see attached site map, Numbers 1, 2 and 3. The following depth intervals were sampled at each specific location:

Sample Location	Depth Below Grade (ft.)
MUF-1	25-2 <i>7</i>
MUF-3	32-34
MUF-4	25-27
MUF-5	33-35
CMB-1	16-18
CMB-2	34-36
CMB-5	26-28
BAF-1	34-36
BAF-2	34-36
BAF-3	3 <i>7</i> -39*
BAF-4	30-32
BAF-5	32-34*

^{*}Sampling interval adjusted based on field conditions

Mr. Carl Hoffman, NYSDEC July 18, 2001 Page Two

Re: Deed Restrictions - Soil Quality Testing at Former Burn Areas Nassau County Fireman's Training Center, Site #1-30-042

All soil samples were collected using decontaminated split spoons driven through hollow stem augers to the selected interval. The soil samples were then logged by NCDPW hydrogeologists and stored in coolers for delivery at the end of each day to Environmental Testing Labs of Farmingdale, NY, a New York State ELAP-CERTIFIED Laboratory.

The split spoon samples were collected at predetermined intervals throughout the vadose zone which matched locations with historically high levels of contamination. Each sample was analyzed for volatile and semi-volatile organic compounds using EPA methods 8260 and 8270B.

The results of the sample analyses are provided for your review in Tables 1 through 4 attached. Review of the semi-volatile organic analysis summary indicates that the concentrations of semi-volatile organic compounds in eleven of the twelve soil samples collected were found to be below both the recommended soil cleanup objectives and the recommended soil cleanup objectives to protect groundwater, as identified in the NYSDEC TAGM No. 4046. The concentration of 2-Methylnapalthalene in the BAF-3 boring at the 37-39 ft. interval was found to be 37.2 ppm or 0.80 ppm above the recommended soil cleanup objective of 36.4 ppm.

Review of the volatile organic analysis summary indicates that volatile organic compounds also were below the levels identified in the NYSDEC TAGM No. 4046 at all twelve sampling intervals with the exception of two compounds, Acetone and Methylene Chloride. Methylene Chloride concentrations in soil exceeded the recommended soil cleanup objective of 0.1 ppm at all five Burn Area Field boring locations and at one Mock-Up Field boring location (MUF-1, 25-27 ft.). Acetone exceeded its recommended soil cleanup objective of 0.2 ppm at the BAF-1, 37-39 ft. interval, and the BAF-5, 32-34 ft. interval, with values of .219 ppm and .230 ppm, respectively.

All methylene chloride results were "flagged" with a "B," indicating that the analyte was found in the associated method blank as well as the sample. The acetone results were "flagged" with a "J," indicating that it is an estimated value with a concentration found below the method detection limit. Both compounds at low concentrations may be lab artifacts which are not indicative of their actual presence in the soil sample.

A review of the results collected from the three most highly contaminated soil zones onsite support the contention that natural aeration of the vadose zone beneath the Fireman's Training Center has provided enough oxygen to maintain biological activity; thus, causing the breakdown of the volatile and semi-volatile organic compounds which were previously identified in the 1986 and 1994 soil sampling events. This most recent sampling event has demonstrated that the site's three designated soil contamination areas consistently show levels of contamination below the NYSDEC's TAGM 4046. Therefore, the NCDPW/Water Resources Unit respectfully requests the State's concurrence that the designated contaminated soil areas at the FTC site have met their remediation goals, and that all deed restrictions associated with these areas can be removed by the County.

If you have any questions regarding the above results or our request, please contact Mr. Michael Flaherty at (516) 571-6850.

Very truly yours,

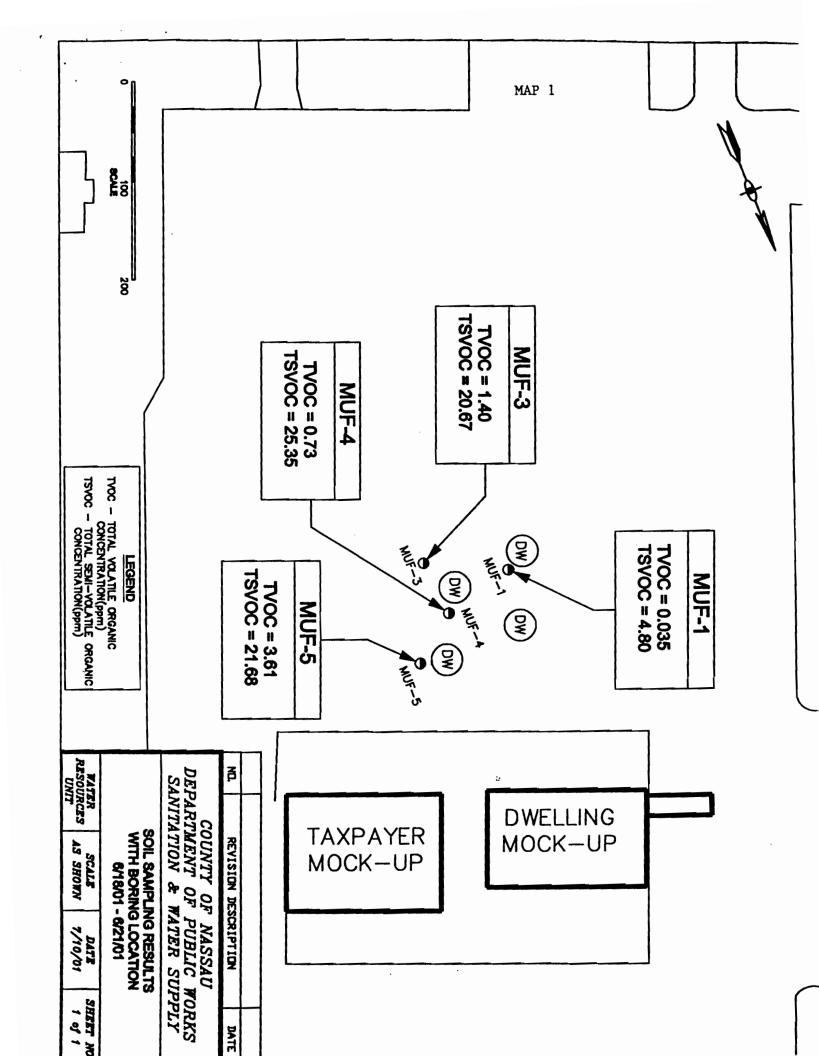
Peter J. Witkowski

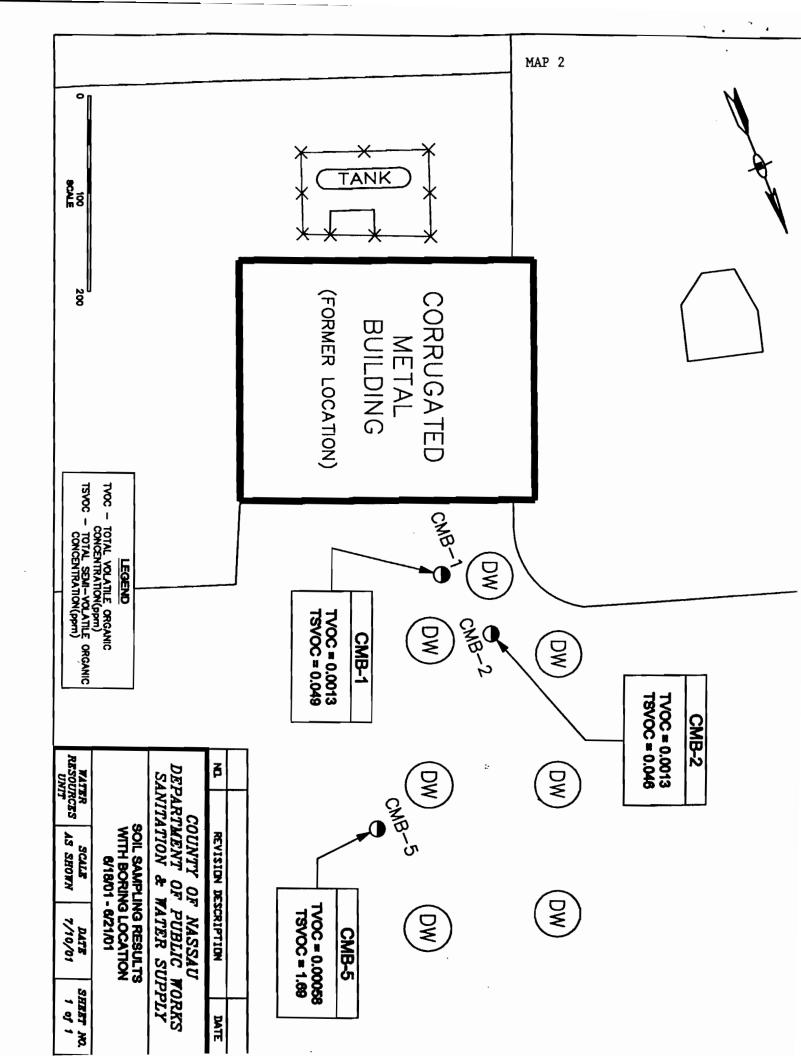
Director of Hazardous Waste Services

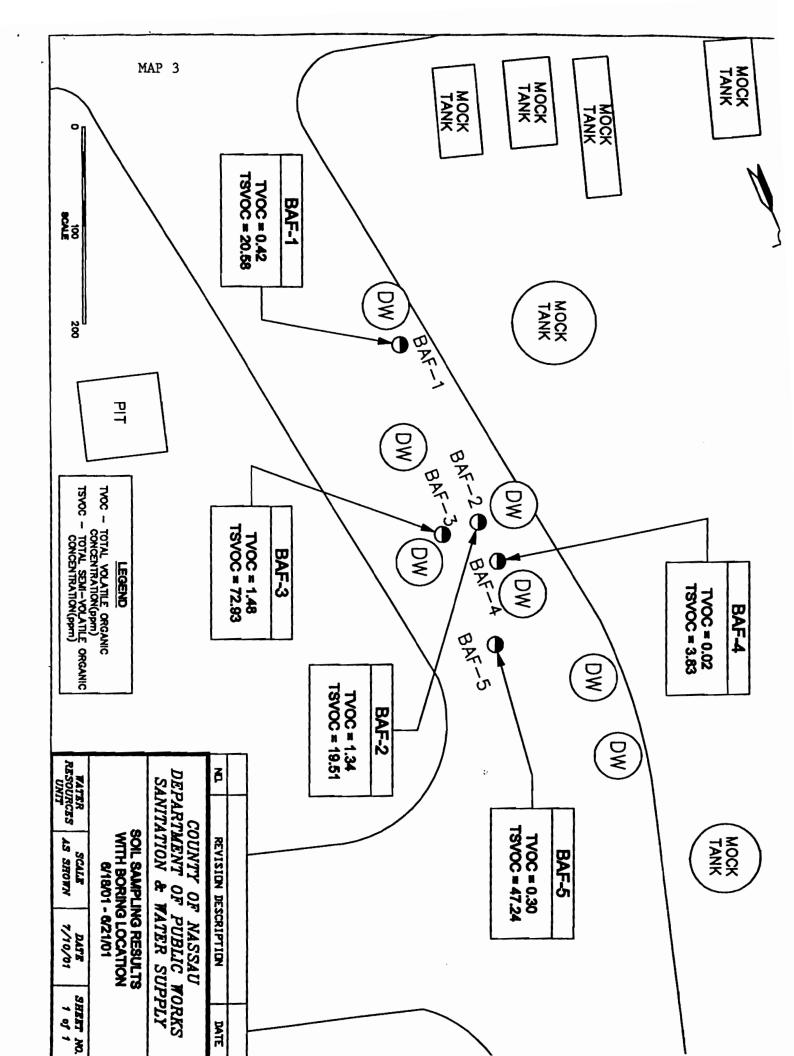
PIW:MF:ib

Attachments

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Michael Flaherty, Hydrogeologist III







FTC - REMEDIATION SEMIVOLATILE ORGANIC ANALYSIS SUMMARY SOIL

SAMPLING DATE: 6/18 -21/2001

1			SOIL F	ORING	AIE:6/18-21			
	BAF - 4	BAF - 5	MUF -1	MUF -4	MUF -5	MUF -3	Recommended Soil Cleanup	Recommended Soil
COMPOUND (MG/KG)	30 - 32 ft.	32 - 34 ft.	25 -27 ft.	25 -27 ft.	33 -35 ft.	32 -34 ft.	Objective to Protect GW(ppm)	Cleanup Objective (ppm)
Phenol	U	U	U	U	U	U	0.03	.03 or MDL
bis(2-Chloroethyl)Ether	U	U	U	U	Ü	U	NA	NA
2-Chlorophenol	U	U	Ū	U	U	U	0.8	0.8
1,3-Dichlorobenzene	U	U	U	υ	Ü	U	1.55	1.6
1,4-Dichlorobenzene	U	U	U	U	U	U	8.5	8.5
1,2-Dichlorobenzene	U	U	U	U	U	U	7.9	7.9
2-Methylphenol	U	U	c	U	U	U	0.1	0.1 or MDL
2,2'-oxbis(1-Chloropropane)	U	U	U	U	U	U	NA NA	NA
4-Methylphenol	U	U	U	U	U	U	0.9	0.9
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	NA	NA NA
Hexachloroethane	U	U	U	U	U	U	NA	NA
Nitrobenzene	U	U	U	U	υ	U	0.2	0.2 or MDL
Isophorone	U	U	U	U	U	U	4.4	4.4
2-Nitrophenol	υ	υ	U	U	U	U	0.33	0.33 or MDL
2,4-Dimethylphenol	U	U	Ü	U	U	U	NA NA	NA
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	NA	NA NA
2,4-Dichlorophenol	U	U	U	U	U	U	0.4	0.4
1,2,4-Trichlorobenzene	U	U	U	U	U	U	NA	NA
Naphthalene	U	0.787	0.267	0.538	0.727	2.65	13	13
4-Chloroaniline	U	U	U	U	U	U	0.22	0.22 or MDL
Hexachlorobutadiene	U	U	U	U	U	U	NA	NA
4-Chloro-3-methylphenol	U	U	U	U	U	U	0.24	0.24 or MDL
2-Methylnaphthalene	U	30.9	2.36	21.2	15.7	9.22	36.4	36.4
Hexachlorocyclopentadiene	U	U	U	U	U	U	NA	NA
2,4,6-Trichlorophenol	U	U	U	U	U	U	NA	NA
2,4,5-Trichlorophenol	U	U	U	U	U	U	0.1	0.1
2-Chloronaphthalene	Ų	U	U_	U	U_	<u>u</u>	NA	NA
2-Nitroaniline	U	U	U	U	U	U	0.43	0.43 or MDL
Dimethylphthalate	U	U	Ų	U	Ü	U	2.0	2.0
Acenaphthylene	0.604	1.72	0.247	0.569	0.359	1.1	41	41
2,6-Dinitrotoluene	U	U_	U	υ	U	U	1.0	1.0
3-Nitroaniline	Ų	U	U	U	U	U	0.5	0.5 or MDL
Acenaphthene	U	U	U	U	U	U	90	50*
2,4-Dinitrophenol	U	U	U	U	U	U	0.2	0.2 or MDL
4-Nitrophenol	U	υ	U	U	Ų	U	0.1	0.1 or MDL
Dibenzofuran	U	U	<u>U</u>	U	0.385	U	6.2	6.2
2,4-Dinitrotoluene	U	כ	U	U	U	U	NA	NA
Diethylphthalate	U	U	U	U	U	U	7.1	7.1
4-Chlorophenyl-phenylether	U	U	_U	_U	U	Ų	NA	NA
Fluorene	1,91	3.71	0. <u>465</u>	0.814	1.27	2.26	350	50*
4-Nitroanaline	U	U	Ų	U	U	U	NA	NA
4,6-Dinitro-2-Methylphenol	U	U	_U	U	_U	U	NA	NA
N-Nitrosodiphenylamine (1)	U	U	U	_U	U	U	NA	NA
4-Bromophenyl-phenylether	U	U	U	<u>U</u>	U	U	NA	NA
Hexachlorobenzene	U	U	U	U	U	U	1.4	0.41
Pentachlorophenol	U	U	U	U	U	U		1.0 or MDL
Phenanthrene	0.456	8.2	1.09	1.74	2.41	4.01	220	50*
Anthracene	0.267	0.673	0.089	0.147	0.26	0.448	700	50*
Carbazole	U	_U	U	U	U	U	NA	NA NA
Di-n-Butylphthalate	U	U	U	U	U	U	8.1	8.1
Fluoranthene	0.152	0.348	0.0595	0.0896	0.147	0.279	1900	50*
Pyrene	0.444	0.9	0.131	0.172	0.242	0.563	665	50*
Butylbenzylphthalate	U	U	<u>U</u>	U	U	U	122	50°
3,3'-Dichlorobenzidine	U	<u>U</u>	U	U	<u>U</u>	U 0 0 0 0 0 0	NA	^0.24 or MDL
Benzo(a)anthracene	U	U	U	0.0094	0.0147	0.0219	3.0	0.4
Chrysene bis(2-Ethylhexl)phthalate	U	U	<u>U</u>	0.0177	0.145	0.0447	0.4	50*
Dis(2-Ethylhexi)phthalate Di-n-octylphthalate	<u>U</u>	U	0.0914	0.0514	0.145	0.0687	435	50*
	U	U	U	U	U	U	120	1.1
Benzo(b)fluoranthene	U	U	U	U	0.0088	U	1.1	1.1
Benzo(k)fluoranthene Benzo(a)pyrene	Ü	Ü	U	U	0.0081	U	1.1	.061 or MDL
Indeno(1,2,3-cd)pyrene	U	U	U	<u>U</u>	U.0061	U	3.2	3.2
Dibenzo(a,h)anthracene	U	U	U	U	Ü	U	165,000	.014 or MDL
	Ü	U	U	U	U	U	800	50°
Benzo(g,h,i)perylene								
TOTALS	3.833	47.238	4.7999	25 <u>.3481</u>	21.6766	20.6653		

Note: Samples Analyzed By: Roy F. Weston Lionville Analytical Laboratory Samples Analyzed For: TCL Semivolatiles LEGEND
U = UNDETECTED
NA = NOT AVAILABLE
B - FOUND IN BLANK
J - ESTIMATED CONCENTRATION
MDL - METHOD DETECTION LIMIT

^{* -} As per proposed TAGM, total VOC's <10ppm, Total Semi VOC's <500 ppm, and individual semi VOC's < 50 ppm</p>

FTC - REMEDIATION SEMIVOLATILE ORGANIC ANALYSIS SUMMARY SOIL

SAMPLING DATE :6/18- 6/21/2001

				ORING				
	CMB -5	CMB -2	CMB - 1	BAF - 1	BAF - 2	BAF - 3	Recommended Soil Cleanup	Recommended Soll
COMPOUND (MG/KG)	26 -28 ft.	34 -36 ft.	16 -18 ft.	34 - 36 ft.	34 -36 ft.	37 -39 ft.	Objective to Protect GW(ppm)	Cleanup Objective (ppm)
Phenol	U	U	U	U	U	U	0.03	.03 or MDL
bis(2-Chloroethyl)Ether	U	U	U	U	U	U	NA	NA
2-Chlorophenol	U	υ	U	U	υ	U	0.8	0.8
1,3-Dichlorobenzene	υ	U	U	U	U	U	1.55	1.6
1,4-Dichlorobenzene	U_	U	U	U	U_	U	8.5	8.5
1,2-Dichlorobenzene	υ	U	U	υ	U	U_	7.9	7.9
2-Methylphenol	υ	U	U	U	U	U	0.1	0.1 or MDL
2,2'-oxbis(1-Chloropropane)	υ	U	U	U	U	U	NA	NA
4-Methylphenol	υ	υ	U	υ	U	U	0.9	0.9
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	NA_	NA
Hexachloroethane	U	U	U	U	U	U	NA_	NA NA
Nitrobenzene	U	U	U	U	U	U	0,2	0.2 or MDL
Isophorone	U	U	U	U	U	U	4.4	4.4 0.33 or MDL
2-Nitrophenol	U	U	U	U	<u> </u>	U	0.33	NA
2,4-Dimethylphenol	U	U	U	U	U	U	NA NA	NA NA
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	NA	0.4
2.4-Dichlorophenol	U	U	U	U	U	U	0.4 NA	0.4 NA
1,2,4-Trichlorobenzene	U	U	U		1,68	0.68	13	13
Naphthalene	U	U	U	1.25 U	1.68 U	U.68	0.22	0.22 or MDL
4-Chloroaniline		U	U	U	U	U	0.22 NA	NA
Hexachlorobutadiene 4-Chloro-3-methylphenol	U	U	U	U	U	U	0.24	0.24 or MDL
	U	Ü	Ü	12.9	11.1	37.2	36.4	36.4
2-Methylnaphthalene	Ü	U	Ü	U U	U U	U	NA	NA
Hexachlorocyclopentadiene	Ü	U	Ü	U	U	U	NA NA	NA NA
2,4,6-Trichlorophenol	Ü	Ü	Ü	U	U	Ü	0.1	0.1
	U	U	Ü	Ü	Ü	U	NA	NA NA
2-Chloronaphthalene 2-Nitroaniline	U	Ü	U	Ü	U	Ü	0.43	0.43 or MDL
Dimethylphthalate	U	Ü	U	u	U	Ü	2.0	2.0
Acenaphthylene	U	U	Ü	0.653	0.822	3.77	41	41
2,6-Dinitrotoluene	Ü	U	Ü	U	U	U	1.0	1.0
3-Nitroaniline	Ü	ŭ	Ü	Ü	Ü	Ü	0.5	0.5 or MDL
Acenaphthene	Ü	ŭ	Ü	Ü	Ü	U	90	50*
2,4-Dinitrophenol	Ü	Ü	Ü	Ü	Ü	Ü	0.2	0.2 or MDL
4-Nitrophenol	Ü	Ü	Ü	Ü	Ü	U	0.1	0.1 or MDL
Dibenzofuran	Ü	Ü	Ü	0.543	U	U	6.2	6.2
2,4-Dinitrotoluene	Ü	U	U	U	U	C	NA	NA NA
Diethylphthalate	1.4	0.0214	0.0238	U	U	U	7,1	7.1
4-Chlorophenyl-phenylether	U	U	U	U	J	U	NA NA	NA
Fluorene	U	U	U	1.29	1.58	8.42	350	50°
4-Nitroanaline	U	U	U	U	U	υ	NA	NA
4,6-Dinitro-2-Methylphenol	U	U	υ	U	U	U	NA NA	NA _
N-Nitrosodiphenylamine (1)	U	U	U	υ	U	U	NA NA	NA
4-Bromophenyl-phenylether	U	U	U	0.0196	U	U	NA	NA
Hexachlorobenzene	U	U	U	U	U_	U	1.4	0.41
Pentachlorophenol	U	U	Ų	U	U	C	1.0	1.0 or MDL
Phenanthrene	0.0078	Ų	U	2.77	2.9	17.5	220	50*
Anthracene	U	U	U	0.393	0.522	1.54	700	
Carbazole	U	Ų	U	U	υ	U	NA NA	NA
Di-n-Butylphthalate	0.022	U	0.0074	U	U	U	8.1	8.1
Fluoranthene	υ	Ų	Ų	0.169	0.222	0.869	1900	50°
Pyrene	U	U	U	0.281	0.361	1.88	665	50*
Butylbenzylphthalate	U	U	U	U	U	U	122	50*
3,3'-Dichlorobenzidine	U	U	U	U	U	U 0.494	NA	NA N
Benzo(a)anthracene	U	U	U	0.014	0.0196	0.181	3.0	^0.24 or MDL 0.4
Chrysene	U	U	U 0.0175	0.0281	0.0407	0.275 0.261	0.4 435	50°
bis(2-EthylhexI)phthalate	0.259	0.0245	0.0175 U	0.118 0.149	0.131 0.12	0.355	120	50°
Di-n-octylphthalate	U	U	U	U.149	U.12	U.355	1.1	1,1
Benzo(b)fluoranthene Benzo(k)fluoranthene	U	U	U	U	U	U	1.1	1.1
Benzo(k)huoranthene Benzo(a)pyrene	U	U	U	U	0.013	C C	1.1	.061 or MDL
Indeno(1,2,3-cd)pyrene	U	U	U	U	U.013	Ü	3.2	3.2
Dibenzo(a,h)anthracene	U	Ü	Ü	٥	U	Ü	165,000	.014 or MDL
Benzo(g,h,i)perylene	U	U	U	U	U	U	800	50*
TOTALS	1.6888		0.0487	20.5777	19.5113		530	
TOTALS	1.0008	0.0459	U.U40/	20.3111	19.5113	12.531		

Note:
Samples Analyzed By:
Roy F. Weston
Lionville Analytical Laboratory
Samples Analyzed For:
TCL Semivolatiles

LEGEND
U = UNDETECTED
NA = NOT AVAILABLE
B - FOUND IN BLANK
J - ESTIMATED CONCENTRATION
MDL - METHOD DETECTION LIMIT

* - As per proposed TAGM, total VOC's <10ppm, Total Semi VOC's <500 ppm, and individual semi VOC's < 50 ppm

FTC - REMEDIATION VOLATILE ORGANIC ANALYSIS SUMMARY SOIL

SAMPLING DATE :6/18 -21/2001

			SOIL B	ORING				
	CMB -5	CMB -2	CMB - 1	BAF - 1	BAF - 2	BAF - 3	Recommended Soll Cleanup	Recommended Soil
COMPOUND (MG/KG)	26 -28 ft.	34 - 36 ft.	16 - 18 ft.	34 - 36 ft.	34 - 36 ft.	37 - 39 ft.	Objective to Protect GW(ppm)	Cleanup Objective (ppm)
Dichlorodifloromethane	U	υ	U	U	U	U		
Chloromethane	U	U	U	U	U	U		
Vinyl Chloride	U	U	U	U	U	U	0.12	0.2
Bromomethane	Ų	U	U	U	Ų	U		
Chloroethane	U	U	U	U	U	U	1.9	1.9
Trichlorflouromethane	U	U	U	U	U	U		
Acetone	U	U	U	U	.195J	.219J	0.11	0.2
1,1-Dicloroethane	U	U	U	U	U	U	0.2	0.2
Methlylene Chloride	.0026B	.0357B	.0366B	.203B	.456B	.467B	0.1	0.1
Carbon disulfide	U	U	U	0.0054	U	U	2.7	2.7
t-1,2-Dichloroethane	U	U	U	U	U	U		
1,1-Dichloroethane	U	U	U	U	U	U	0.2	0.2
2-Butanone	U	U	U	U	U	U	0.3	0.3
Chloroform	Ü	U	U	U	U	U	0.3	0.3
1,1,1-Trichloroethane	U	U	U	U	U	u	0.76	0.8
Carbon Tetrachloride	U	U	U	U	U	U	_0.6	0.6
1,2-Dichloroethane	U	U	U	U	U	U	0.1	0.1
Benzene	U	U	U	U	U	U	0.06	0.06
Trichloroethene	U	U	U	U	U	U	0.7	0.7
1,2-Dichloropropane	U	U	U	U	U	U		
Bromodichloromethane	U	U	U	U	U	U		
4-Methly-2-Pentanone	U	U	U	U	U	U	1	1
2-Hexanone	U	U	U	U	U	U		
c-1,3-Dichloropropene	υ	U	U	U	U	U		
Toluene	U	0.00065	0.00066	0.0045	U	U	1.5	1.5
t-1,3-Dichloropropene	U	U	U	U	U	U		
1,1,2-Trichloroethane	U	U	U	U	U	U		
Tetrachloroethene	U	U	U	U	U	U	1.4	1.4
Dibromochloromethane	U	U	U	U	U	U	N/A	N/A
1,2-Dibromomethane	U	U	U	U	υ	U		
Chlorobenzene	U	U	U	U	U	U	1.7	1.7
Ethylbenzene	U	0.00064	U	0.285	0.44	0.474	5.5	5.5
m,p-xylene	0.00058	U	0.00067	0.0823	0.824	0.782	1.2	1.2
0-xylene	U	U	U	0.0307	0.0749	0.227	1.2	1.2
Styrene	Ų	U	U	U	Ü	U		
Bromoform	U	U	U	U	U	U		
1,1,2,2-Tetrachloroethane	۳	U	U	U	U	U	0.6	0.6
1,2,3-Trichloropropane	U	U	U	U	U	U	0.34	0.4
1,3-Dichlorobenzene	U	U	J	U	U	U	1.55	1.6
1,4-Dichlorobenzene_	U	U	U	U	U	U	8.5	8.5
1,2-Dichlorobenzene	U	U	U	0.0086	U	U	7.9	7.9
1,2-Dibromo-3-chloropropane	U	U	Ŭ	U	U	U		
TOTALS	0.00058	0.00129	0.00133	0.4165	1.3389	1.483		

Note:

Samples Analyzed By:
Roy F. Weston
Lionville Analytical Laboratory

Samples Analyzed For:

TCL Semivolatiles

LEGEND

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J - ESTIMATED CONCENTRATION MDL - METHOD DETECTION LIMIT

* - As per proposed TAGM, total VOC's <10ppm, Total Semi VOC's <500 ppm, and individual semi VOC's < 50 ppm volsoil1

FTC - REMEDIATION VOLATILE ORGANIC ANALYSIS SUMMARY SOIL

SAMPLING DATE :6/18 - 21/2001

			SOILE	ORING				
	BAF -4	BAF -5	MUF -1	MUF -4	MUF -5	MUF -3	Recommended Soil Cleanup	Recommended Soil
COMPOUND (MG/KG)	30 - 32 ft.	32- 34 ft.	25 - 27 ft	25 - 27 ft.	33 -35 ft.	32 -34 ft.	Objective to Protect GW(ppm)	Cleaning Objective (com)
Dichlorodifloromethane	Ū	U	U	U	U	U	S S S S S S S S S S S S S S S S S S S	picaush ciplactive (bbii)
Chloromethane	Ū	U	U	U	Ü	Ü		
Vinyl Chloride	U	U	U	U	Ū	Ü	0.12	0.2
Bromomethane	U	U	U	U	Ü	Ü		0.2
Chloroethane	U	U	U	Ú	U	u	1.9	1.9
Trichlorflouromethane	υ	U	U	U	U	Ü		1.3
Acetone	U	.230J	U	U	U	Ü	0.11	0.2
1,1-Dicloroethane	U	U	U	U	U	u	0.2	0.2
Methlylene Chloride	.0162B	.488B	.0137B	.0074B	U	Ü	0.1	0.1
Carbon disulfide	U	U	U	U	U	Ü	2.7	2.7
t-1,2-Dichloroethane	U	U	U	U	U	Ü		
1,1-Dichloroethane	U	U	U	U	U	U	0.2	0.2
2-Butanone	U	U	U	U	Ū	u	0.3	0.3
Chloroform	_	U	U	υ	U	Ū	0.3	0.3
1,1,1-Trichloroethane	C	U	U	U	C	U	0.76	0.8
Carbon Tetrachloride	C	U	U	U	Ü	Ū	0.6	0.6
1,2-Dichloroethane	U	U	U	U	U	Ü	0.1	0.1
Benzene	U	U	U	0.0038	U	Ū	0.06	0.06
Trichloroethene	U	U	U	U	U	U	0.7	0.7
1,2-Dichloropropane	Ū	U	U	U	U	U		
Bromodichloromethane	Ū	U	U	U	U	U		
4-Methly-2-Pentanone	U	U	U	U		U	1	1
2-Hexanone	U	U	U	U	U	U		
c-1,3-Dichloropropene	U	U	U	Ū	U	U		
Toluene	0.0035	U	Ü	0.0052	U	U	1.5	1.5
t-1,3-Dichloropropene	U	U	U	C	U	C		
1,1,2-Trichloroethane	U	U	U	U	υ	U		
Tetrachloroethene	U	U	U	0.0015	U	C	1.4	1.4
Dibromochloromethane	U	U	U	U	U	U	N/A	N/A
1,2-Dibromomethane	U	U	U	U	U	U		
Chlorobenzene	U	U	ט	Ü	U	U	1.7	1.7
Ethylbenzene	U	0.299	0.0168	0.15	0.393	0.233	5.5	5.5
m,p-xylene	0.011	U	0.0181	0.321	2.24	1.01	1.2	1.2
0-xylene	0.0046	U	5	0.247	0.841	0.157	1.2	1.2
Styrene	Ú	U	U	U	U	U		
Bromoform	U	Ü	כ	Ū	U	U		
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.6	0.6
1,2,3-Trichloropropane	U	U	U	U	U	U	0.34	0.4
1,3-Dichlorobenzene	U	U	U	U	U	U	1.55	1.6
1,4-Dichlorobenzene	U	U	U	U	U	U	8.5	8.5
1,2-Dichlorobenzene	U	U	U	U	0.139	U	7.9	7.9
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U		
TOTALS	0.0191	0.299	0.0349	0.7285	3.613	1.4		

Note: Samples Analyzed By: Roy F. Weston Lionville Analytical Laboratory Samples Analyzed For: TCL Semivolatiles LEGEND
U = UNDETECTED
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MDL - METHOD DETECTION LIMIT

 - As per proposed TAGM, total VOC's <10ppm, Total Semi VOC's <500 ppm, and individual semi VOC's < 50 ppm







July 18, 2001

Mr. Carl Hoffman New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control 625 Broadway Albany, NY 12233

Re: Deed Restrictions - Soil Quality Testing at Former Burn Areas Nassau County Fireman's Training Center, Site #1-30-042

Dear Mr. Hoffman:

As I informed you several weeks ago, the Nassau County Department of Public Works (NCDPW), Water Resources Unit would be collecting soil samples at the Fireman's Training Center (FTC) site to monitor changes in the level of contamination relative to past sampling events. The site's contaminated soil areas were established in the FTC's Record of Decision (ROD), dated February 26, 1993. These areas are described below, in detail. All locations, the sampling, and analytical testing methods for this field work followed the site's State approved Remediation Monitoring Plan, dated September 1994. The following is a summary of the work and our findings.

Three former Burn Areas at the FTC were designated contaminated soil areas in the site's ROD. These areas are identified as the Mock-Up Field (MUF), Corrugated Metal Building Field (CMB), and the Burn Area Field (BAF), see attached site map, Numbers 1, 2 and 3. The following depth intervals were sampled at each specific location:

Sample Location	Depth Below Grade (ft.)				
MUF-1	25-27				
MUF-3	32-34				
MUF-4	25-27				
MUF-5	33-35				
CMB-1	16-18				
CMB-2	34-36				
CMB-5	26-28				
BAF-1	34-36				
BAF-2	34-36				
BAF-3	37-39*				
BAF-4	30-32				
BAF-5	32-34*				

^{*}Sampling interval adjusted based on field conditions

Mr. Carl Hoffman, NYSDEC July 18, 2001 Page Two

Re: Deed Restrictions - Soil Quality Testing at Former Burn Areas Nassau County Fireman's Training Center, Site #1-30-042

All soil samples were collected using decontaminated split spoons driven through hollow stem augers to the selected interval. The soil samples were then logged by NCDPW hydrogeologists and stored in coolers for delivery at the end of each day to Environmental Testing Labs of Farmingdale, NY, a New York State ELAP-CERTIFIED Laboratory.

The split spoon samples were collected at predetermined intervals throughout the vadose zone which matched locations with historically high levels of contamination. Each sample was analyzed for volatile and semi-volatile organic compounds using EPA methods 8260 and 8270B.

The results of the sample analyses are provided for your review in Tables 1 through 4 attached. Review of the semi-volatile organic analysis summary indicates that the concentrations of semi-volatile organic compounds in eleven of the twelve soil samples collected were found to be below both the recommended soil cleanup objectives and the recommended soil cleanup objectives to protect groundwater, as identified in the NYSDEC TAGM No. 4046. The concentration of 2-Methylnapalthalene in the BAF-3 boring at the 37-39 ft. interval was found to be 37.2 ppm or 0.80 ppm above the recommended soil cleanup objective of 36.4 ppm.

Review of the volatile organic analysis summary indicates that volatile organic compounds also were below the levels identified in the NYSDEC TAGM No. 4046 at all twelve sampling intervals with the exception of two compounds, Acetone and Methylene Chloride. Methylene Chloride concentrations in soil exceeded the recommended soil cleanup objective of 0.1 ppm at all five Burn Area Field boring locations and at one Mock-Up Field boring location (MUF-1, 25-27 ft.). Acetone exceeded its recommended soil cleanup objective of 0.2 ppm at the BAF-1, 37-39 ft. interval, and the BAF-5, 32-34 ft. interval, with values of .219 ppm and .230 ppm, respectively.

All methylene chloride results were "flagged" with a "B," indicating that the analyte was found in the associated method blank as well as the sample. The acetone results were "flagged" with a "J," indicating that it is an estimated value with a concentration found below the method detection limit. Both compounds at low concentrations may be lab artifacts which are not indicative of their actual presence in the soil sample.

A review of the results collected from the three most highly contaminated soil zones onsite support the contention that natural aeration of the vadose zone beneath the Fireman's Training Center has provided enough oxygen to maintain biological activity; thus, causing the breakdown of the volatile and semi-volatile organic compounds which were previously identified in the 1986 and 1994 soil sampling events. This most recent sampling event has demonstrated that the site's three designated soil contamination areas consistently show levels of contamination below the NYSDEC's TAGM 4046. Therefore, the NCDPW/Water Resources Unit respectfully requests the State's concurrence that the designated contaminated soil areas at the FTC site have met their remediation goals, and that all deed restrictions associated with these areas can be removed by the County.

If you have any questions regarding the above results or our request, please contact Mr. Michael Flaherty at (516) 571-6850.

Very truly yours,

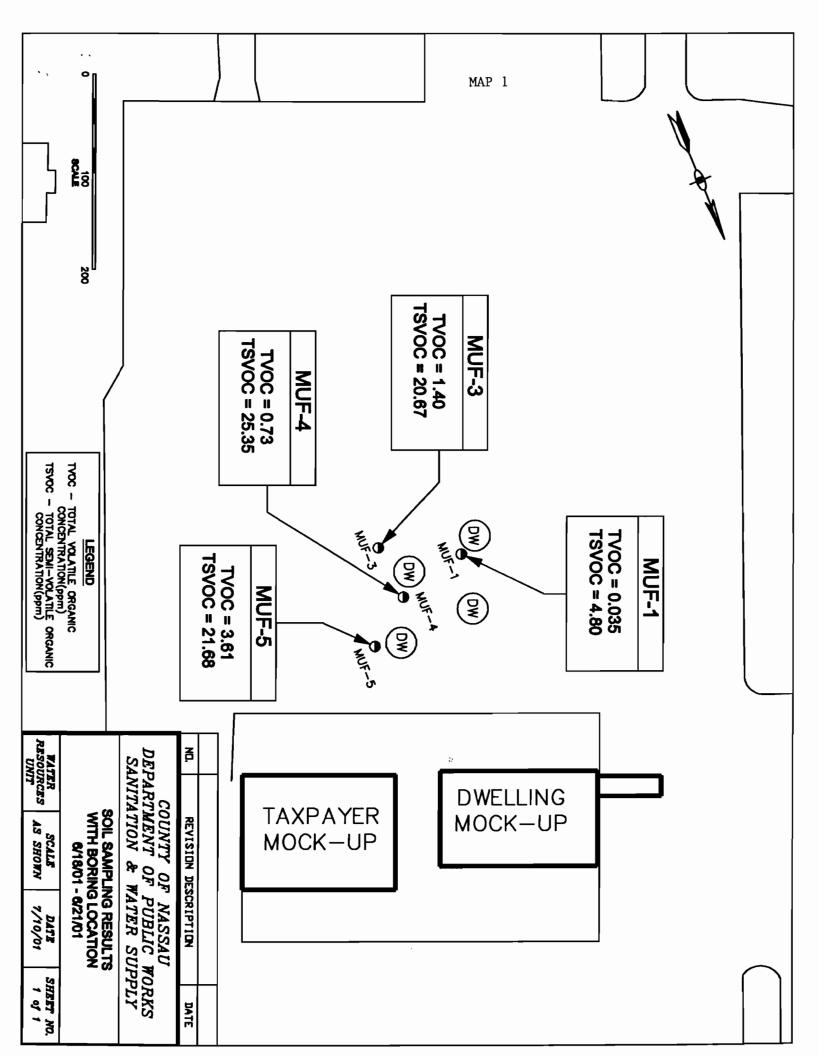
Peter J. Witkowski

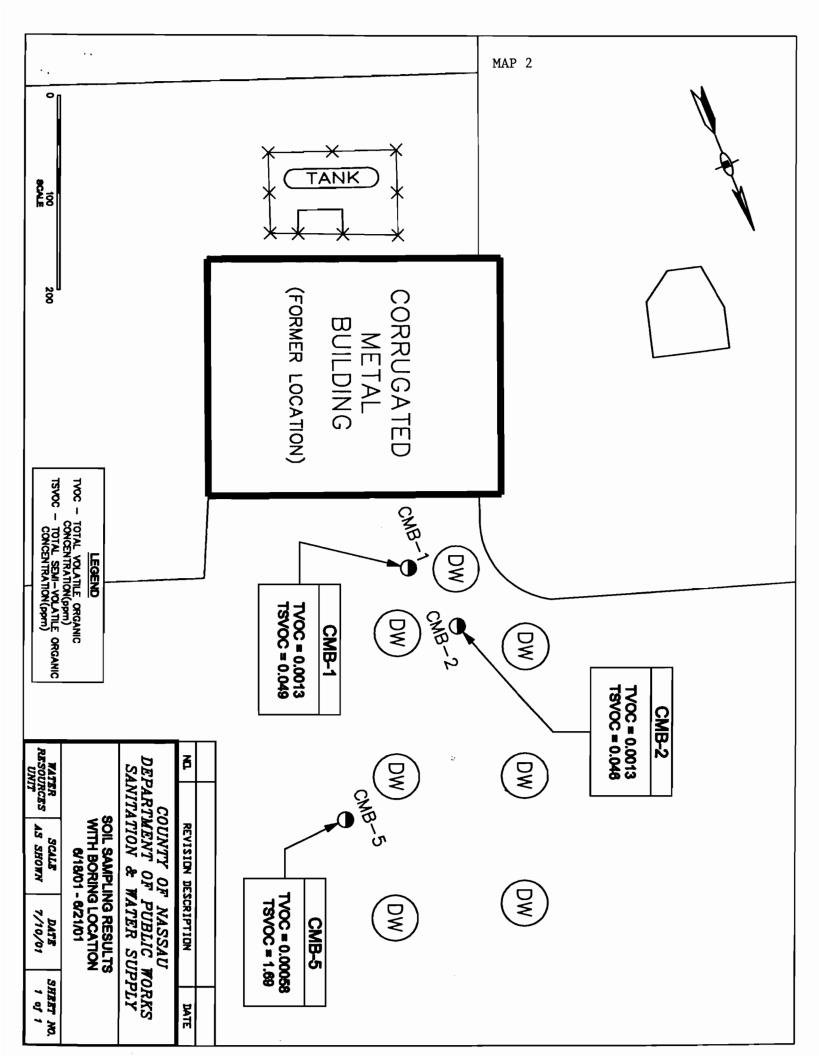
Director of Hazardous Waste Services

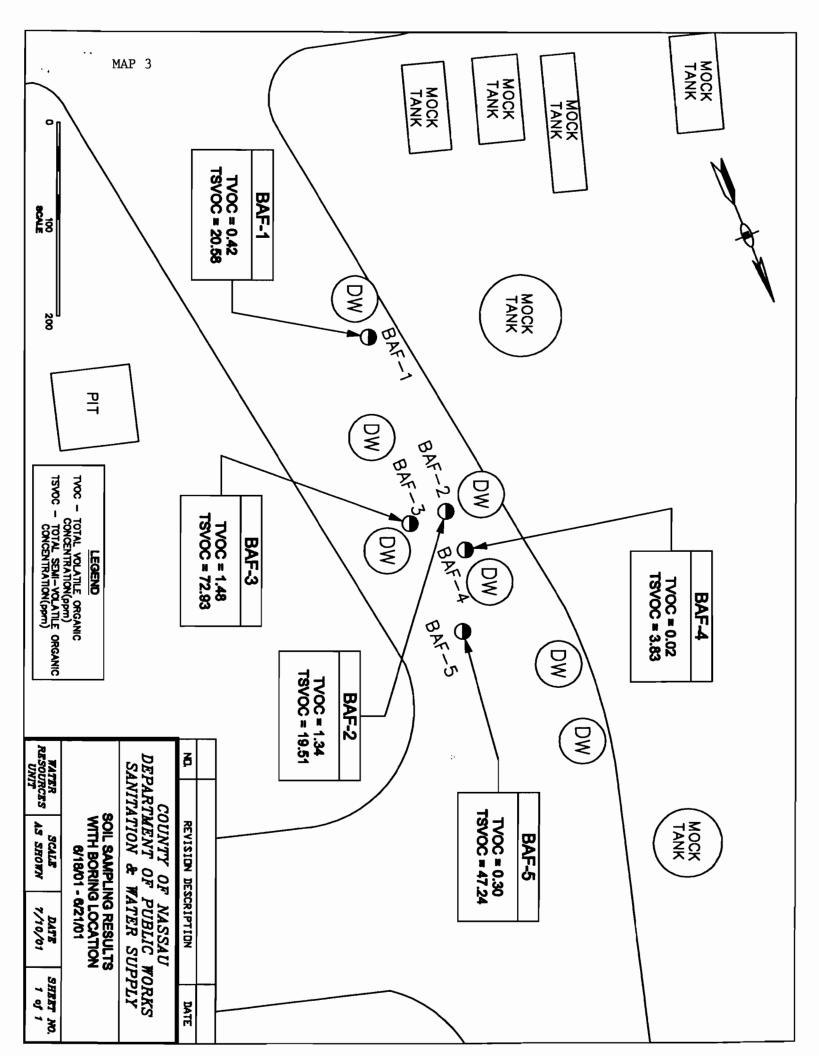
PJW:MF:jb

Attachments

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Michael Flaherty, Hydrogeologist III







FTC - REMEDIATION SEMIVOLATILE ORGANIC ANALYSIS SUMMARY SOIL

SAMPLING DATE :6/18 -21/2001

	SAMPLING DATE :6/18 -21/2001									
	SOIL BORING									
	BAF - 4	BAF - 5	MUF -1	MUF -4	MUF -5	MUF -3	Recommended Soil Cleanup	Recommended Soil		
COMPOUND (MG/KG)	30 - 32 ft.	32 - 34 ft.	25 -27 ft.	25 -27 ft.	33 -35 ft.	32 -34 ft.	Objective to Protect GW(ppm)	Cleanup Objective (ppm)		
Phenol	U	U	U	U	U	U	0.03	.03 or MDL		
bis(2-Chloroethyl)Ether	U	U	U	U	U	U	NA NA	NA NA		
2-Chlorophenol	U	U	U	U	U	U	0.8	8.0		
1,3-Dichlorobenzene	U	U	U	U	U	U	1.55	1.6		
1,4-Dichlorobenzene	Ü	Ü	Ü	U	Ü	U	8.5	8.5		
1,2-Dichlorobenzene	U	Ü	Ü	Ü	Ü	Ü	7.9	7.9		
2-Methylphenol	Ü	Ü	Ü	Ü	U	Ü	0.1	0.1 or MDL		
2,2'-oxbis(1-Chloropropane)	Ü	Ü	Ü	Ü	U	Ü	NA	NA NA		
4-Methylphenol	U	Ü	Ü	U	Ü	Ü	0.9	0.9		
N-Nitroso-di-n-propylamine	Ü	Ü	U	U	U	U		NA		
		U					NA			
Hexachloroethane	U		U	U	U	U	NA_	NA		
Nitrobenzene	U	U	U	U	U	U	0.2	0.2 or MDL		
Isophorone	U	U	U	U	U	U	4.4	4.4		
2-Nitrophenol	U	U	U	U	U	U	0.33	0.33 or MDL		
2,4-Dimethylphenol	U	U	U	U	U	U	NA	NA		
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	NA	NA _		
2,4-Dichlorophenol	U	U	U	U	U	U	0.4	0.4		
1,2,4-Trichlorobenzene	U	U	U	U	U	U	NA NA	NA		
Naphthalene	U	0.787	0.267	0.538	0.727	2.65	13	13		
4-Chloroaniline	Ü	U	U	U	U	U	0.22	0.22 or MDL		
Hexachlorobutadiene	U	Ü	Ü	Ü	Ü	U	NA NA	NA		
4-Chloro-3-methylphenol	Ü	U	Ü	Ü	Ü	Ü	0.24	0.24 or MDL		
2-Methylnaphthalene	Ü	30.9	2.36	21.2	15.7	9.22	36.4	36.4		
	U									
Hexachlorocyclopentadiene		U	U	U	U	U	NA NA	NA		
2,4,6-Trichlorophenol	U	U	U	U	U	U	NA	NA		
2,4,5-Trichlorophenol	U	U	U	U	U	U	0.1	0.1		
2-Chloronaphthalene	U	U	U	U	υ	U	NA	NA		
2-Nitroaniline	U	U	U	U	U	U	0.43	0.43 or MDL		
Dimethylphthalate	U	U	U	U	U	U	2.0	2.0		
Acenaphthylene	0.604	1.72	0.247	0.569	0.359	1.1	41	41		
2,6-Dinitrotoluene	U	U	U	U	U	U	1.0	1.0		
3-Nitroaniline	U	U	Ū	U	Ü	U	0.5	0.5 or MDL		
Acenaphthene	Ŭ	Ü	Ü	Ü	Ű	Ü	90	50*		
2,4-Dinitrophenol	Ü	U	U	Ü	U	Ü	0.2	0.2 or MDL		
4-Nitrophenol	Ü	U	U	U	Ü	U	0.1	0.1 or MDL		
		U		U	0.385					
Dibenzofuran	U	_	U			U	6.2	6.2		
2,4-Dinitrotoluene	U	U	U	U	U	U	NA NA	NA		
Diethylphthalate	U	U	U	U	U	U	7.1	7.1		
4-Chlorophenyl-phenylether	U	U	U	U	U	U	NA	NA		
Fluorene	1.91	3.71	0.465	0.814	1.27	2.26	350	50*		
4-Nitroanaline	U	U	U	U	U	U	NA	NA		
4,6-Dinitro-2-Methylphenol	U	U	U	U	U	U	NA	NA		
N-Nitrosodiphenylamine (1)	U	U	U	U	U	U	NA	NA		
4-Bromophenyl-phenylether	U	U	U	U	U	U	NA NA	NA		
Hexachiorobenzene	Ü	Ü	U	U	Ü	U	1.4	0.41		
Pentachlorophenol	U	Ü	U	U	Ü	U	1.0	1.0 or MDL		
Phenanthrene	0.456	8.2	1.09	1.74	2.41	4.01	220	50*		
Anthracene	0.430	0.673	0.089	0.147	0.26	0.448	700	50*		
Carbazole	U.267	U.673	U	U. 147	U.26	U.448	NA NA	NA		
		_	U	U						
Di-n-Butylphthalate	U	U			U	U	8.1	8.1		
Fluoranthene	0.152	0.348	0.0595	0.0896	0.147	0.279	1900	50*		
Pyrene	0.444	0.9	0.131	0.172	0.242	0.563	665	50*		
Butylbenzylphthalate	U	U	U	U	U	U	122	50*		
3,3'-Dichlorobenzidine	υ	U	U	U	U	U	NA NA	NA		
Benzo(a)anthracene	U	υ	U	0.0094	0.0147	0.0219	3.0	^0.24 or MDL		
Chrysene	U	Ų	U	0.0177	U_	0.0447	0.4	0.4		
bis(2-Ethylhexl)phthalate	U	U	0.0914	0.0514	0.145	0.0687	435	50*		
Di-n-octylphthalate	U	U	U	U	C	U	120	50 *		
Benzo(b)fluoranthene	U	U	U	U	υ	U	1.1	1.1		
Benzo(k)fluoranthene	U	U	U	U	0.0088	U	1.1	1.1		
Benzo(a)pyrene	Ü	Ü	Ů	U	0.0081	Ü	11	.061 or MDL		
Indeno(1,2,3-cd)pyrene	Ü	Ü	U	U	U	Ü	3.2	3.2		
Dibenzo(a,h)anthracene	Ü	U	Ü	U	U	U	165,000	.014 or MDL		
3 . 2	U	U	U	U	U	Ü	800	50*		
Benzo(g,h,i)perylene TOTALS										
	3.833	47.238	4.7999	25.3481	21.6766	20.6653				

Note:
Samples Analyzed By:
Roy F. Weston
Lionville Analytical Laboratory
Samples Analyzed For:
TCL Semivolatiles

LEGEND
U = UNDETECTED
NA = NOT AVAILABLE
B - FOUND IN BLANK
J - ESTIMATED CONCENTRATION
MOL - METHOD DETECTION LIMIT

^{* -} As per proposed TAGM, total VOC's <10ppm, Total Semi VOC's <500 ppm, and individual semi VOC's < 50 ppm</p>

FTC - REMEDIATION SEMIVOLATILE ORGANIC ANALYSIS SUMMARY SOIL

SAMPLING DATE :6/18- 6/21/2001

COMPOUND (MORKG)		\$AMPLING DATE :6/18-6/21/2001 \$QIL:BORING									
Pinano		CMB -5	CMB -2			BAF - 2	BAF - 3	Recommended Soil Cleanup	Recommended Soil		
Piene	COMPOUND (MG/KG)	26 -28 ft.	34 -36 ft.			34 -36 ft.	37 -39 ft.	He C + C + C + C + C + C + C + C + C + C	Cleanup Objective (ppm)		
2-Chonoplemon	Phenol										
Zéboropelend U <	bis(2-Chloroethyl)Ether	U	U	U	U	U	U	NA NA	NA		
1.3-Dictriorebanzame		U	U	U	U	U	U	0.8	8.0		
12.Dictorobenzeme	1,3-Dichlorobenzene	U	U	U	U	U	U	1.55	1.6		
1.2-Dischordonareame	1,4-Dichlorobenzene	U	U	U	U	U	U	8.5	8.5		
22-aosité -Chicopropane U U U U U U O,0 -Nitriaco-di-propylamine U U U U U U O,0 -Nitriaco-di-propylamine U U U U U U NA NA -Nitriaco-di-propylamine U U U U U U NA NA -Nitriaco-di-propylamine U U U U U U NA NA -Nitriaco-di-propylamine U U U U U U NA NA -Nitriaco-di-propylamine U U U U U U U O,0 -Nitriaco-di-propylamine U U U U U U U O,0 -Nitriaco-di-propylamine U U U U U U U O,0 -Nitriaco-di-propylamine U U U U U U U U O,0 -Nitriaco-di-propylamine U U U U U U NA NA -Nitriaco-di-propylamine U U U U U U NA NA -Nitriaco-di-propylamine U U U U U U U NA NA	1,2-Dichlorobenzene	U	U	U	U	U	U	7.9	7.9		
22-exolis (-Chicopropane)		υ	U	U	U	U	U	0.1	0.1 or MDL		
		U	U	U	U	U	U	NA	NA NA		
Prisson Pris	4-Methylphenol	U	U	U	U	U	U	0.9	0.9		
Nirobanzene	N-Nitroso-di-n-propylamine	U	U	U	U	U	U	NA .	NA NA		
Sophonone		U	U	U	U	U	U	NA	NA NA		
2-Nitrophenol	Nitrobenzene	U	U	U	U	U	U	0.2	0.2 or MDL		
2.4-Dimethylphenol U	Isophorone	U	U	U	U	U	U	4.4	4.4		
bisig2-Chichoreshavymethane	2-Nitrophenol	U	U	U	U	U	U	0.33	0.33 or MDL		
2.4-Dichrophenol	2,4-Dimethylphenol	U	U	U	U	U	U	NA NA	NA		
12.4-Trichlorobenzene	bis(2-Chloroethoxy)methane	U	U	U	U	U	U	NA NA	NA		
12,4-Inchlorobenzene	2,4-Dichlorophenol	U	U	U	U	U	U	0.4	0.4		
4-Chivoraniine U	1,2,4-Trichlorobenzene	U	U	U	U	U	U	NA NA	NA		
4-Chloropalinie	Naphthalene	U	U	U	1.25	1.68	0.68	13	13		
Hexachtorobuladiene	4-Chloroaniline	υ	U	U	U	U	U	0.22	0.22 or MDL		
4-Chiero-S-methylphenoi	Hexachlorobutadiene	U	U	U	U	U	U	NA NA	NA		
2-Methy/naphthalane	4-Chloro-3-methylphenol	U	U	U	U	U	U	0.24	0.24 or MDL		
24.5-frichlorophenol	2-Methylnaphthalene	U	U	U	12.9	11.1	37.2	36.4	36.4		
24.5FTichlorophenol	Hexachiorocyclopentadiene	U	U	U	υ	U	U	NA NA	NA NA		
2-Chieronaphthalene	2,4,6-Trichlorophenol	U	U	U	U	U	U	NA NA	NA		
2-Nitrosniline	2,4,5-Trichlorophenol	U	U	U	U	U	U	0.1	0.1		
Dimetrylyphthalate	2-Chloronaphthalene	U	U	U	U	U	U	NA	NA_		
Acensahthylene	2-Nitroaniline	U	U	U	U	U	U	0.43	0.43 or MDL		
2.6-Dinitrotobene	Dimethylphthalate	U	U	U	U	U	U	2.0	2.0		
2.6-Dinitrotoubene	Acenaphthylene	U	U	U	0.653	0.822	3.77	41	41		
Acenaphthene U U U U U U U U O 0.2 2,4-Dinitrophenol U U U U U U U U O 0.2 2,4-Dinitrophenol U U U U U U U O 0.2 0,2 or MDL 1,4-Nitrophenol U U U U U U U O 0.1 0,1 or MDL Dibenzofuran U U U U U S,543 U U G,62 6,2 4-Dinitrotoluene U U U U U U U V NA NA NA Diethyphthalate 1,4,4 0,0214 0,0238 U U U NA NA NA A-Chlorophenyl-phenylether U U U U 1,584 3,50 5,0° 4-Nitrophenyl-phenylether U U U U 1,584 3,50 5,0° 4-Nitrophenyl-phenylether U U U U U NA N-Diethyphenylether U U U U U U NA N-Diethyphenylether U U U U U NA NA NA NA NA NA N-Diethyphenylether U U U U U NA NA NA NA NA N-Diethyphenylether U U U U NA NA NA NA NA N-Nitrosodiphenyl-phenylether U U U U NA NA NA N-Nitrosodiphenyl-phenylether U U U U U NA NA NA NA N-Nitrosodiphenyl-phenylether U U U U U NA NA NA NA N-Nitrosodiphenyl-phenylether U U U U NA NA NA NA NA N-Reschiorobenzene U U U U U U NA N	2,6-Dinitrotoluene	U	U	U	U	U	U	1.0	1.0		
2.4-Dinitrophenol	3-Nitroaniline	U	U	U	U	U	U	0.5	0.5 or MDL		
4-Nitrophenol U U U U U U U D 0.1 0.1 or MDL Dibenzofuran U U U U U U D 0.43 U U D 6.2 6.2 6.2 6.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0	Acenaphthene	U	U	U	U	U	U	90	50*		
4-Nitrophenol U U U U U U U NA	2,4-Dinitrophenol	U	U	U	U	U	C	0.2	0.2 or MDL		
2,4-Dinitrotoluene	4-Nitrophenol	U	U	U	U	U	U	0.1	0.1 or MDL		
Diethylphthalate	Dibenzofuran	U	U	U	0.543	U	U	6.2	6.2		
4-Chlorophenyl-phenylether U U U U U U U U U U U U U U U U U U U	2,4-Dinitrotoluene	U	U	U	U	U	٦	NA NA	NA		
Fluorene U U U U 1.29 1.58 8.42 350 50* 4-Nitroanaline U U U U U U NA	Diethylphthalate	1.4	0.0214	0.0238	U	U	U	7.1	7.1		
### 4-Niroanaline	4-Chlorophenyl-phenylether	U	U	U	U	U	U	NA NA	NA		
4.6-Dinitro-2-Methylphenol U U U U U U U U U NA NA N-Nitrosodiphenyl-phenylether U U U U U U U NA NA Hexachlorophenyl-phenylether U U U U U U U NA NA Hexachlorophenol U U U U U U U U 1.0 1.0 or MDL Pentachlorophenol U U U U U U U U 1.0 1.0 or MDL Pentachlorophenol U U U U U U U U U 1.0 1.0 1.0 1.0 0.41 1.0	Fluorene	U	U	U	1.29	1.58	8.42	350	50*		
N-Nitrosodiphenylamine (1)	4-Nitroanaline	Ð	U	U	U	U	U	NA NA	NA		
N-Nitrosodiphenylamine (1) V U U U U U U U U NA	4,6-Dinitro-2-Methylphenol	U	U	U	U	U	U	NA	NA		
Hexachlorophenol	N-Nitrosodiphenylamine (1)	U	U	U	U	U	U	NA NA	NA		
Hexachlorobenzene	4-Bromophenyl-phenylether	U	U	U	0.0196	U _	U	NA NA			
Phenanthrene 0.0078	Hexachlorobenzene	U	U	U	U	U		1.4			
Anthracene U U U U 0.393 0.522 1.54 700 50* Carbazole U U U U U U U U NA	Pentachlorophenol	U		U	U			1.0			
Carbazole U U U U U U U U U U NA NA Di-n-Butylphthalate 0.022 U 0.0074 U U U U B.1 8.1 8.1 Fluoranthene U U U U 0.169 0.222 0.869 1900 50° Pyrene U U U U 0.281 0.361 1.88 665 50° Butylbenzylphthalate U U U U U U U U U NA	Phenanthrene	0.0078	U	U	2.77						
Di-n-Butylphthalate	Anthracene	U	U	U	0.393	0.522	1.54				
Fluoranthene	Carbazole	U	_	U							
Pyrene	Di-n-Butylphthalate	0.022	U	0.0074	U	U	U	8.1	8.1		
Butylbenzylphthalate	Fluoranthene										
3.3*-Dichlorobenzidine U	Pyrene										
Description	Butylbenzylphthalate										
Chrysene U U U U 0.0281 0.0407 0.275 0.4 0.4 bis(2-Ethylhexl)phthalate 0.259 0.0245 0.0175 0.118 0.131 0.261 435 50* Di-n-octylphthalate U U U 0.149 0.12 0.355 120 50* Benzo(b)fluoranthene U U U U U U 1.1 1.1 1.1 Benzo(k)fluoranthene U U U U U U U 1.1 1.1 1.1 Benzo(k)fluoranthene U U U U U U U U 1.1 1.1 1.1 Benzo(k)fluoranthene U U U U 0.013 U 1.1 1.1 1.1 Benzo(a)pyrene U U U U U U U U 3.2 3.2 Dibenzo(a,h)anthracene U U U<	3,3'-Dichlorobenzidine										
Display Disp	Benzo(a)anthracene										
Din-octylphthalate	Chrysene										
Benzo(b) fluoranthene											
Benzo(k)fluoranthene	Di-n-octylphthalate										
Benzo(a)pyrene	Benzo(b)fluoranthene										
Inden((1,2,3-cd)pyrene	Benzo(k)fluoranthene										
Dibenzo(a,h)anthracene U	Benzo(a)pyrene										
Benzo(g,h,i)perylene U U U U U U 800 50*	Indeno(1,2,3-cd)pyrene										
TOTALS 1.6888 0.0459 0.0487 20.5777 19.5113 72.931	Benzo(g,h,i)perylene								50*		
	TOTALS	1.6888	0.0459	0.0487	20.5777	19.5113	72.931				

Note: Samples Analyzed By: Roy F. Weston Lionville Analytical Laboratory Samples Analyzed For: TCL Semivolatiles LEGEND
U = UNDETECTED
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B - FOUND IN BLANK
J - ESTIMATED CONCENTRATION
MDL - METHOD DETECTION LIMIT

^{* -} As per proposed TAGM, total VOC's <10ppm, Total Semi VOC's <500 ppm, and individual semi VOC's < 50 ppm

FTC - REMEDIATION VOLATILE ORGANIC ANALYSIS SUMMARY SOIL

SAMPLING DATE :6/18 -21/2001

			\$OIL £	ORING				
	CMB -5	CMB -2	CMB - 1	BAF - 1	BAF - 2	BAF - 3	Recommended Soil Cleanup	Recommended Soil
COMPOUND (MG/KG)	26 -28 ft.	34 - 36 ft.	16 - 18 ft.	34 - 36 ft.	34 - 36 ft.	37 - 39 ft.	Objective to Protect GW(ppm)	Cleanup Objective (ppm)
Dichlorodifloromethane	U	U	U	U	U	U		
Chloromethane	U	U	U	U	U	U		
Vinyl Chloride	U	U	U	U	U	U	0.12	0.2
Bromomethane	U	U	U	U	U	U		
Chloroethane	U	U	U	U	U	U	1.9	1.9
Trichlorflouromethane	U	U	U	U	U	U		
Acetone	U	U	U	U	.195J	.219J	0.11	0.2
1,1-Dicloroethane	U	U	U	U	U	U	0.2	0.2
Methlylene Chloride	.0026B	.0357B	.0366B	.203B	.456B	.467B	0.1	0.1
Carbon disulfide	U	U	U	0.0054	U	U	2.7	2.7
t-1,2-Dichloroethane	U	U	U	U	U	U		
1,1-Dichloroethane	U	U	U	U	U	U	0.2	0.2
2-Butanone	U	U	U	U	U	U	0.3	0.3
Chloroform	U	U	U	U	U	U	0.3	0.3
1,1,1-Trichloroethane	U	U	U	U	U	U	0.76	0.8
Carbon Tetrachloride	U	U	U	U	U	U	0.6	0.6
1,2-Dichloroethane	U	U	U	U	U	U	0.1	0.1
Benzene	U	U	U	U	U	U	0.06	0.06
Trichloroethene	U	U	U	U	U	U	0.7	0.7
1,2-Dichloropropane	U	U	U	U	υ	U		_
Bromodichloromethane	U	U	U	U	U	U		
4-Methly-2-Pentanone	U	U	U	U	U	U	1	1
2-Hexanone	U	Ū	U	U	U	U		
c-1,3-Dichloropropene	U	U	U	U	U	U		
Toluene	Ü	0.00065	0.00066	0.0045	U	U	1.5	1.5
t-1,3-Dichloropropene	U	υ	U	U	U	U		
1,1,2-Trichloroethane	U	U	U	U	U	U		
Tetrachloroethene	U	U	U	U	U	U	1.4	1.4
Dibromochloromethane	U	U	U	U	U	U	N/A	N/A
1,2-Dibromomethane	U	U	U	U	U	U		
Chlorobenzene	U	U	U	U	U	U	1.7	1.7
Ethylbenzene	U	0.00064	υ	0.285	0.44	0.474	5.5	5.5
m,p-xylene	0.00058	U	0.00067	0.0823	0.824	0.782	1.2	1.2
0-xylene	U	U	U	0.0307	0.0749	0.227	1.2	1.2
Styrene	U	U	U	U	U	U		
Bromoform	U	U	U	U	U	U		
1,1,2,2-Tetrachloroethane	U	Ü	Ü	U	U	Ü	0.6	0.6
1,2,3-Trichloropropane	Ü	Ū	U	U	U	U	0.34	0.4
1,3-Dichlorobenzene	Ü	Ü	Ü	Ü	U	Ū	1.55	1.6
1,4-Dichlorobenzene	U	Ü	Ü	U	U	U	8.5	8.5
1.2-Dichlorobenzene	Ü	Ū	Ü	0.0086	U	U	7.9	7.9
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U		
TOTALS	0.00058	0.00129	0.00133	0.4165	1.3389	1,483		
TOTALO	0.00000	0.00123	0.00100	J.7100	1.0000	1.700		

Note: Samples Analyzed By: Roy F. Weston Lionville Analytical Laboratory Samples Analyzed For: TCL Semivolatiles LEGEND
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 * - As per proposed TAGM, total VOC's <10ppm, Total Semi VOC's <500 ppm, and individual semi VOC's < 50 ppm volsoil1

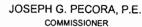
FTC - REMEDIATION VOLATILE ORGANIC ANALYSIS SUMMARY SOIL

SAMPLING DATE :6/18 - 21/2001

				ORING			1	
	BAF -4	BAF -5	MUF -1	MUF -4	MUF -5	MUF -3	Recommended Soil Cleanup	Recommended Soil
COMPOUND (MG/KG)	30 - 32 ft.	32- 34 ft.	25 - 27 ft	25 - 27 ft.	33 -35 ft.	32 -34 ft.	Objective to Protect GW(ppm)	Cleanup Objective (ppm)
Dichlorodifloromethane	U	U	U	U	U	U		
Chloromethane	U	U	U	U	U	U		
Vinyl Chloride	U	U	U	U	U	U	0.12	0.2
Bromomethane	U	U	U	U	U	U		
Chloroethane	U	U	U	U	U	U	1.9	1.9
Trichlorflouromethane	U	Ü	U	U	Ú	Ü		
Acetone	U	.230J	U	U	U	U	0.11	0.2
1,1-Dicloroethane	U	U	U	U	U	Ü	0.2	0.2
Methlylene Chloride	.0162B	.488B	.0137B	.0074B	Ū	Ü	0.1	0.1
Carbon disulfide	U	U	U	U	Ü	Ü	2.7	2.7
t-1,2-Dichloroethane	Ŭ	ŭ	Ü	U	Ü	Ü		
1,1-Dichloroethane	Ŭ	Ŭ	Ŭ	Ü	U	Ü	0.2	0.2
2-Butanone	Ü	Ü	Ü	Ü	Ü	Ü	0.3	0.3
Chloroform	Ü	Ü	Ü	U	Ü	Ü	0.3	0.3
1,1,1-Trichloroethane	Ü	Ü	Ü	U	Ü	Ü	0.76	0.8
Carbon Tetrachloride	Ü	Ü	Ü	U	U	Ü	0.6	0.6
1.2-Dichloroethane	ŭ	Ü	Ü	U	U	Ü	0.1	0.1
Benzene	Ü	Ü	Ü	0.0038	Ü	U	0.06	0.06
Trichloroethene	U	U	Ü	U.0030	U	U	0.7	0.7
1,2-Dichloropropane	U	U	Ü	U	U	U	0.7	0.7
Bromodichloromethane	U	U	U	U	U	U		
4-Methly-2-Pentanone	u	U	Ü	U	U	Ü	1	1
2-Hexanone	U	U	U	U	U	U	l	·
c-1,3-Dichloropropene	U	U	U	U	U	U		
Toluene	0.0035	U	U	0.0052	U	U	1.5	1.5
	U.0035	U		U.0052	U	U	1.5	1.5
t-1,3-Dichloropropene	U	U	U	U	U	U		
1,1,2-Trichloroethane	U	U	U		U	U	1.4	1.4
Tetrachloroethene	U	U	Ü	0.0015 U	U	U	1.4 N/A	N/A
Dibromochloromethane	U	U	U	U	U	U	N/A	IN/A
1,2-Dibromomethane	_				-	U	4.7	4.7
Chlorobenzene	U	U	U	U	U	0.233	1.7 5.5	1.7 5.5
Ethylbenzene	U	0.299	0.0168	0.15	0.393			
m,p-xylene	0.011	U	0.0181	0.321	2.24	1.01	1.2	1.2
0-xylene	0.0046	U	U	0.247	0.841	0.157	1.2	1.2
Styrene	U	U	U	U	U	U		
Bromoform	U	U	U	U	U	U		
1,1,2,2-Tetrachioroethane	U	U	U	U	U	U	0.6	0.6
1,2,3-Trichloropropane	U	U	U	U	U	U	0.34	0.4
1,3-Dichlorobenzene	U	U	U	U	U	U	1.55	1.6
1,4-Dichlorobenzene	U	U	U	U	U	U	8.5	8.5
1,2-Dichlorobenzene	U	U	U	U	0.139	U	7.9	7.9
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U		
TOTALS	0.0191	0.299	0.0349	0.7285	3.613	1.4		

Note: Samples Analyzed By: Roy F. Weston Lionville Analytical Laboratory Samples Analyzed For: TCL Semivolatiles LEGEND
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* - As per proposed TAGM, total VOC's <10ppm, Total Semi VOC's <500 ppm, and individual semi VOC's < 50 ppm volsoil2







COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

July 11, 2001

New York State Office of Parks Recreation and Historic Preservation Long Island Region - Belmont Lake State Park P.O. Box 247 Babylon, New York 11702-0247

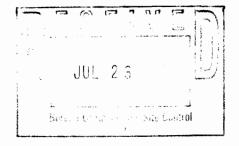
Attn: Mr. Neil Rosenberg, P.E. Park's Engineer

Re: Water Reuse from Fireman's Training Center Groundwater Remediation Facility for Bethpage State Park Irrigation

Dear Mr. Rosenberg:

I was very pleased to hear from you and was informed that State Parks wanted to move forward with the water reuse project we had previously discussed. I truly believe that the reuse of the treated groundwater from the Fireman's Training Center Groundwater Remediation Facility (FTC) for irrigation at Bethpage State Park (BSP) will certainly be of mutual benefit.

In order for me to proceed with the agreement between the County and State Parks, I will need a letter from State Parks stating their desire to move forward with the project. This letter should be addressed to Joseph G. Pecora, P.E., Commissioner, Nassau County Department of Public Works, 1550 Franklin Avenue, Mineola, New York 11501. In addition, I will need any comments State Parks may have regarding the draft agreement I sent to you back in January. For your convenience, I have enclosed a copy of that draft agreement.



'Mr. Neil Rosenberg, New York State Office of Parks

July 11, 2001

Page Two

Re: Water Reuse from Fireman's Training Center

Groundwater Remediation Facility for

Bethpage State Park Irrigation

Once I have received the above information, I can then begin the processing of the agreement through the required County agencies. In general, this process takes several months.

Again, I look forward to the water reuse project. If you have any questions, please call me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW

Enclosure

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Karl Hoffman, NYSDEC - Albany 🗸

THOMAS S. GULOTTA COUNTY EXECUTIVE



JOSEPH G. PECORA, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS

MINEOLA, NEW YORK 11501-4822

May 21, 2001

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the April 2001 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. There were no excedences of the discharge limitations in March. Please note that the facility was shut down on March 14, 2001 due to a problem with the insulation on the air stripper blowers' duct work. Repairs were completed on April 12, 2001, and the facility resumed operation on April 13, 2001.

If you have any questions concerning the monthly reports, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:dc

Attachment

c: Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK 5																																•
WEEK 4 04/25/01	561000 813500	BDL	BDL	BDL	BDL	BDL	BDI BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	400.0	241.0	641.0	0.9	BDL	13.0	BDL	
WEEK 3 04/17/01	405234 514900	BDL	BDL BDL	BDL	BDL	BDL	BDL BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	264.0	308.0	572.0	6.0	BDL	BDL	BDL	
WEEK 2*											_																0.0					
WEEK 1*																											0.0					
COMP'T MDL	A N A	1.1		1.0	1.4	1.7		1.2	2.4	1.3	1.2	10.0	10.0	- -	6.0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	ΑN	5.0	48.0	40.0	2.0	work
UNITS	GPD GPD	l/g n	/6 n. :		l/g u	/b n) D C) D J	l/g n	l/g n	l/g n	l/g n	l/g n				l/g n		µ д/I	l/g ц				l/g n						l/g μ	l/g n	on blower due
DISCHARGE LIMITATIONS	MONITOR	5	w w	2	2	0 0	7.5	വ	2	2	2	20	20	7	20	20	9	20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000	20	oression insulation of
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE 1.2/TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHYLENE BENZENE	DEINZEINE TETBACHI OBOFTHYI FNF	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, TOTAL	CHROMIUM, TOTAL	* Plant shut down due to failure of noise supression insulation

^{*} Plant shut down due to failure of noise supression insulation on blower duct work.



JOSEPH G. PECORA, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501- 4822

April 19, 2001

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the March 2001 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. There were no excedences of the discharge limitations in March. Please note that the facility was shut down on March 14, 2001 due to a problem with the insulation on the air stripper blowers' duct work. Repairs were completed on April 12, 2001, and the facility resumed operation on April 13, 2001.

If you have any questions concerning the monthly reports, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:dc

Attachment



JOSEPH G. PECORA, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

April 6, 2001

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Reports

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the January and February 2001 Monthly Effluent Monitoring Reports for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. In January we observed in weeks 4 and 5 a slight excedence to the discharge limit for the parameter 1,2 (Cis) - Dichloroethene. This condition did not persist in our February monitoring results and it appears that the January excedences were the result of sampling anomalies. We will continue to investigate the January events and notify you if we can identify a cause. Also please note that we continue to experience an excedence to our discharge limit for the secondary contaminant, manganese.

If you have any questions concerning the monthly reports, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:dc

Attachment

 Joseph L. Davenport, Acting Division Head of Sanitation and Water Supply Joseph Walker, Assistant Superintendent of Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC



JOSEPH G. PECORA, P.E.

Bureau Of Hazardous Site Control

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

January 22, 2001

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report - December 2000 Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the December 2000 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. Please note, there were no excedences of the discharge limitations in December.

If you have any questions concerning the monthly report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:dc

Attachment

THOMAS S. GULOTTA



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS

MINEOLA, NEW YORK 11501-4822

December 20, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Reports

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the November 2000 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. There were no excedences of the discharge limitations in November.

Bureau (If Hazard run bus Control

If you have any questions concerning the monthly report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:dc

Attachment



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

November 22, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Reports

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the November 2000 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. There were no excedences of the discharge limitations in November.

If you have any questions concerning the monthly report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

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PJW:JNW:dc

Attachment



JOHN M. WALTZ, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

October 23, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report September 2000 Nassau County Fireman's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the September 2000 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. Please note that there were no excedances of our discharge criteria for the month of September.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:

Attachment



JOHN M. WALTZ, P.E.

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501- 4822

September 27, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report/ August 2000

Nassau County Fireman's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the August 2000 Monthly Effluent Monitoring Reports for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. Please note that there were no excedances of our discharge criteria for the month of August.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Toseph Walker

Director of Hazardous Waste Services

PJW:JNW:tj

Attachment



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS

MINEOLA, NEW YORK 11501-4822



JOHN M. WALTZ, P.E.

September 8, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report/April - July 2000 Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the April, May June and July 2000 Monthly Effluent Monitoring Reports for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. Please note that there was only one excedances to our discharge criteria for the month of May.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Toseph Walker

Director of Hazardous Waste Services

PJW:JNW:dc

Attachment



JOHN M. WALTZ, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822



April 10, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report/March 2000

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the March 2000 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. Please note that there were no excedances to our discharge criteria for the month of March. However, we are still experiencing technical problems with our flow monitoring equipment and software.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

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PJW:JNW:dc

Attachment

c: John J. Pascucci, Acting Division Head of Sanitation and Water Supply Joseph Walker, Assistant Superintendent of Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC



JOHN M. WALTZ, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

April 3, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report/January 2000

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the January 2000 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. Please note that during the first two weeks of January we were performing tests on the metals precipitation treatment system, which resulted in excedences to our iron and manganese discharge limitations. In addition, we experienced during the entire month problems with our flow monitoring equipment, which has been corrected.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

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PJW:JNW:dc

Attachment

c: John J. Pascucci, Acting Division Head of Sanitation and Water Supply Joseph Walker, Assistant Superintendent of Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC



JOHN M. WALTZ, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

April 3, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report/February 2000

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the February 2000 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. Please note that there were no excedences to our discharge limitations for the February 2000 monitoring period.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

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Attachment

 John J. Pascucci, Acting Division Head of Sanitation and Water Supply Joseph Walker, Assistant Superintendent of Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC



JOHN M. WALTZ, P.E. COMMISSIONER

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2000

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

February 7, 2000

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the December 1999 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. The facility was shut down for the first two weeks of December to allow for construction change order piping reconfiguration work. Please note that there were no excedences to our discharge limitations for the December 1999 monitoring period.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:dc

Attachment

c: John J. Pascucci, Acting Division Head of Sanitation and Water Supply Joseph Walker, Assistant Superintendent of Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC



JOHN M. WALTZ, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA. NEW YORK 11501-4822

December 21, 1999

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Report

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the November 1999 Monthly Effluent Monitoring Report for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. Please note that there were no excedences to our discharge limitations for the November 1999 monitoring period.

If you have any questions concerning the monthly monitoring report, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

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PJW:JNW:dc

Attachment

c: John J. Pascucci, Acting Division Head of Sanitation and Water Supply (w/attachment) Joseph Walker, Assistant Superintendent of Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC



JOHN M. WALTZ, P.E. COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
MINEOLA, NEW YORK 11501-4822

November 29, 1999

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Reports

Nassau County Firemen's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the October 1999 Monthly Effluent Monitoring Reports for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. The only excedence to our discharge limitations was for the secondary contaminant, iron, which occurred on the second week of October. The process has been reviewed; the excedence appears to be the result of sampling error, and all following sampling events for October were in full compliance with our effluent limitations.

If you have any questions concerning the monthly reports, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:dc

Attachment

c: John J. Pascucci, Acting Division Head of Sanitation and Water Supply Joseph Walker, Assistant Superintendent of Water Supply Frank Amilicia, Assistant Superintendent of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

October 27, 1999

NYS Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control Room 252 50 Wolf Road Albany, NY 12233-7010

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Reports

Nassau County Fireman's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Please find attached the August and September, 1999 Monthly Effluent Monitoring Reports for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, N.Y. The only excedences to our discharge limitations were for the naturally occurring secondary parameters, iron and manganese, which occurred on the last week of August and the first week of September. Process adjustments have been made and, as you can see, all following sampling events for September were in full compliance with our effluent limitations.

Now that the format has been established for the monthly reports, I plan on issuing a specific month's report within three weeks of the month's end date. If you have any questions concerning the monthly reports, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:dc Attachments

c: John Pascucci, Acting Division Head of Sanitation and Water Supply Joe Walker, Assistant Superintendent of Water Supply Frank Amilicia, Assistant Superintend of Sewage Treatment Plants Robert Schneck, Regional Water Engineer, Region 1, NYSDEC

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P. 01

TIJOMAS S. GULDITA COUNTY EXECUTIVE



JOSEPH G. PECORA, P.E. COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS

DIVISION OF SANITATION AND WATER SUPPLY WATER RESOURCES UNIT TELEFAX NUMBER (516) 571-6858

DATE: 12/17/01
TO: Carl Hoffman
FAX NO. (5/8) 402 - 9022
FROM: Joe Walker
NUMBER OF PAGES:// (INCLUDING THIS PAGE)
IF THERE ARE ANY PROBLEMS RECEIVING THIS TRANSMISSION, PLEASE CALL (516) 571-6850
Coarl. I recieved your fax. I sent a reply, since you did not confirm reciept I guess you didn't get it.

Toe

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P. 10

THOMAS & GULOTIA COUNTY EXECUTIVE JONEMI G. PECORA, P.E. COMMISSIONES



December 14, 2001

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, 11th Floor 625 Broadway Albany, NY 12233-7014

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Reports

Nussau County Fireman's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Attached is the November 2001 Monthly Effluent Monitoring Report for the groundwater remediation at the Pireman's Training Center site, in Old Bethpage, NY. The only exceedances of the discharge limitations were for manganese.

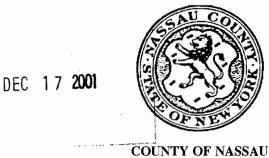
If you have any questions concerning the monthly reports, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski Director of Hazardous Waste Services

PJW:JNW:cs

Attachinent



DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

December 10, 2001

New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Hazardous Site Control, 11th Floor 625 Broadway Albany, NY 12233-7014

Attn: Carl Hoffman, P.E.

Environmental Engineer II

Re: Monthly Effluent Monitoring Reports

Nassau County Fireman's Training Center, Site #1-30-042

Dear Mr. Hoffman:

Attached is the April through October 2001 Monthly Effluent Monitoring Reports for the groundwater remediation at the Fireman's Training Center site, in Old Bethpage, NY. The only exceedances of the discharge limitations were for manganese in October.

If you have any questions concerning the monthly reports, please contact me at (516) 571-6970.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

PJW:JNW:cs

Attachment

APRIL 2001

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WEEK 4 04/25/01	WEEK 3 04/17/01	WEEK 2*	WEEK 1*	COMP'T MDL	ONITS	DISCHARGE LIMITATIONS	PARAMETER PARAMETER

MAY 2001

JUNE 2001

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PARAMETER	LIMITATIONS		MDL	06/05/01	06/12/01	06/19/01	06/26/01	1
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR MONITOR	GPD GPD	ΝX	828200 834800	804729 835400	795886 836400	833229 836300	
VINYL CHLORIDE	Δī	μ g/l	1.1	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHANE	51	μ g/l	<u>-</u>	BDL	BDL	BDL	BDL	
1,2(TRANS)-DICHLOROETHENE	ı Gı	μ g/l	<u>.</u>	BDL	BDL	BDL	BDL	
1,2(CIS)-DICHLOROETHENE	ט מ	1,0/1 1/0/1	1.0	8 B	B B	3 B	B B	
TRICHLOROETHENE	10	μQ/ Ψ	1.7	BDL	BDL	BP :	BDL 1	
BENZENE	0.7	μ g/l	0.7	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	O1	μg/l	1.2	BDL	BDL	BDL	BDL	
TOLUENE	ڻ د	l/6 л	1.2	BDL	BDL	BDL	BDL	
m,p-XYLENE	5	μg/l	2.4	BDL	BDL	BDL	BDL	
0-XYLENE	n O	μ g/l	. Δ ω	BDL	BDL	3 B	80	
METHYL ETHYL KEYTONE	50	1 <u>1</u>	10.0	BD 2	BDL	BD F	BD 2	
ACETONE	50	μg/l	10.0	BDL	BDL	BDL	BDL	
CHLOROFORM	7	µ g/I	1.1	BDL	BDL	BDL	BDL	
DICHLOROBROMOMETHANE	50	μ g/l	0.9	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	50	μ g/i	0.7	BDL	BDL	BPL	BDL	
TOTAL VOCS	10	μ <u>φ/</u>	1.7	B B	BD_	BDL	BDL	
PHENANTHRENE	50	μ g/l	1.0	BDL	BDL	BDL	BDL	
FLUORENE	50	μ g/l	1.0	BDL	BDL	BDL	BDL	
PYRENE	50	μ g/l	1.0	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	μ g/l	1.0	BDL	BDL	BPL	BDL	
DINETRY BUTHALATE	50		<u></u>	<u> </u>	BD BD	B B	B BD	
DIETHYL PHTHALATE	50	1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0	1.0	BD 5	BDL F	BP 5	BD 2	
IRON, TOTAL	600	μ g/l	2.0	122.00	90.00	114.0	65.0	
MANGANESE, TOTAL	600	μ g/l	1.0	273.0	310.0	276.0	274.0	
SUM IRON & MANGANESE	1000	μ g/l	A	395.0	400.0	390.0	339.0	
NICKEL, TOTAL	2000	μ g/l	5.0	6.0	5.0	6.0	6.0	
ARSENIC, TOTAL	50	μ g/l	48.0	BDL	BDL	11.0	BDL	
ALUMINUM, TOTAL	2000 50	μ g/l	40.0	3 BP	BBC	3 B	BBC	

JULY 2001

AL		NICKEL, TOTAL	NESE	MANGANESE, TOTAL 600		DIETHYL PHTHALATE 50	DIMETHYL PHTHALATE 50	DI-N-OCTYL PHTHALATE 50	BIS(2-ETHLHEXYL)PHTHALATE 4.3	PYRENE 50	FLUORENE 50	PHENANTHRENE 50		NAPHTHALENE 10	DIBROMOCHLOROMETHANE 50)MOMETHANE	ORM		METHYL ETHYL KEYTONE 50	OROETHENE		NE -		LOROETHENE	BENZENE 0.7			1,2(CIS)-DICHLOROETHENE 5	ETHENE	1,1-DICHLOROETHANE 5	VINYL CHLORIDE 5	FLOW, DAILY AVG FLOW, DAILY MAX MONITOR	ת ק	EFFLUENT DISCHARGE
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40.0 2.0	48.0	5.0	N P	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.7	0.7	0.9	<u>.</u>	10.0	10.0	1.2	1.3	2.4	1.2	1.2	0.7	1.7	1.4	1.0	1.1	1.1	1.1	N N	MDL	COMPT
BDL BDL	BDL	6.0	341.0	274.0	67.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	831100 838600	07/03/01	WEEK 1
8DL	BDL	5.0	365.0	275.0	90.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL I	BDL	BDL	BDL	BDL	BDL	BDL	BDL	831786 833067	07/10/01	WEEK 2
8P.P	BDL	6.0	318.0	271.0	47.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BD (BDI	BDL	BDL	BDL	BDL	BDL	BDL	827957 843600	07/17/01	WEEK 3
BDL BDL	BDL	5.0	303.0	258.0	45.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL .	BDI	BDL	BDL	BDL	BDL	BDL	BDL	829571 848800	07/24/01	WEEK 4
12.0 BDL	BDL	5.0	221.0	165.0	56.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL .	BD	BDL	BDL	BDL	BDL	BDL	BDL	832057 860100	07/31/01	WEEK 5

AUGUST 2001

TAL 2000 μg/l 48.0 BDL BDL 17.0 TAL 2000 μg/l 40.0 104.0 11.0 BDL	2000 µ g/l 5.0 5.0 5.0 5.0	μg/l 1.0	600 μ g/l 2.0 79.00 46.00	μ g/l 1.0 BDL BDL	50 μg/l 1.0 BDL BDL	50 μ g/l 1.0 BDL BDL	HLHEXYL)PHTHALATE $4.3 \parallel \mu g/l \parallel 1.0 \parallel BDL \parallel BDL \parallel$	50 μg/l 1.0 BDL BDL	50 μg/l 1.0 BDL BDL	1.0 BDI BDI	μ g/l 0.0 BDL BDL	10 µ g/l 1.7 BDL BDL	50 μg/l 0.7 BDL BDL	MOMETHANE 50 $\mu \alpha / 1$ 0.9 BDL BDL BDL	ORM 7 µ g/l 1.1 BDL BDL	50 µg/l 10.0 BDL BDL	NE 50 μg/l 10.0 BDL BDL	OROETHENE 5 $\mu \alpha / 1$ 1.2 BDL BDL	5 u o/l 1.3 BDL BDL	VE 5 La/l 2.4 BDL BDL BDL	5 1.2 BDL BDL	LOROETHENE 5 µg/l 1.2 BDL BDL	0.7 u o/l 0.7 BDL BDL	10	5 μ q/l 1.4 BDL BDL	5 μg/l 1.0 BDL BDL	ETHENE 5 u a/l 1.1 BDL BDL BDL	HANE $5 \mu g/l 1.1 BDL BDL$	5 µ a/l 1.1 BDL BDL	FLOW, DAILY AVG MONITOR GPD NA 829443 836600 841029 FLOW, DAILY MAX MONITOR GPD NA 837100 827300 849100	ETER LIMITATIONS MDL 08/07/01 08/14/01	DISCHARGE UNITS COMP'T WEEK 1 WEE
BDL BDL	5.0	214.0	69.0	BDL	BDL :	BDL	BDL	BD.	BD 2	BD	0.0	BD	BD F	BD I	BDL	BD	BD :	BD (B (B 6	BDI	BD (BD	BDL	BDL	BD	BDI	BD	BDI	841029 849100	08/21/01	WEEK 3
8DL 8DL	4.0	77.0	60.0	BDL	BDL	BDL	BDL	BDL	BD	RD (0.0	BD ;	BDL	BD F	BDL	BDL	BD C	BD (B (2	B 6	BD	BDL -	B	BD :	BDL	BDL .	BD	BDL	BD	843700 846800	08/28/01	WEEK 4

SEPTEMBER 2001

BDL	BD (BDL R	80C	40.0 2.0		2000 50	ALUMINUM, TOTAL CHROMIUM, TOTAL
4.0 BDL	4.0 BDL	4.0 BDL	2.0 BDL	5.0 48.0	г g/	2000 50	NICKEL, TOTAL ARSENIC. TOTAL
137.0	163.0	211.0	141.0	ΝA		1000	SUM IRON & MANGANESE
60.0 77.0	81.0 82.0	124.00 87.0	78.0	1.0	1,6 i	600	MANGANESE, TOTAL
BDL	1.9	1.6	1.3	1.0	μ g/l	50	DIETHYL PHTHALATE
BDL	BDL	BDL	BDL	1.0	μg/l	50	DIMETHYL PHTHALATE
BDL	BDL	BDL	BDL	1.0	µ 9/I	50	DI-N-OCTYL PHTHALATE
BDL	BDL	BDL	BDL	1.0	ју ју	4.3	BIS(2-ETHLHEXYL)PHTHALATE
BDL	BDL	BDL	BDL	1.0	μ g/l	50	PYRENE
BD F	BDL BDL	BDL BDL	BDL C	1.0	1/8 ri	50	FLUORENE
0.0	0.0	BDL	BDL	0.0	μ g/l	5	TOTAL VOCs
BDL	BDL	BDL	BDL	1.7	μ g/l	10	NAPHTHALENE
BDL	BDL	BDL	BDL	0.7	µ g/I	50	DIBROMOCHLOROMETHANE
BDL	BDL	BDL	BDL	0.9	μ g/l	50	DICHLOROBROMOMETHANE
BDL	BD (BDL	BDL	1.1	1/g 1/	7	CHLOROFORM
BDL	BDL	BDL	BDL	10.0	۳ Q/	50	ACETONE
BDL 1	BDL I	BDL	BDL	10.0	μ <u>(</u>	50	METHYL ETHYL KEYTONE
BD !	BDL	BDL	BDL	1.2	۳ Q/I	OI (1,1-DICHLOROETHENE
BDL :	BDL	BDL	BDL	1.3	۳ <u>۱</u>	ე	o-XYLENE
BDL 1	BDL	BDL	BDL	2.4	۳ <u>۱</u>	<u>ე</u>	m.p-XYLENE
BDL	BDL	BDL	BDL	1.2	۳ (d)	₋	TOLUENE
BDL F	BD (BDL I	BDL	1.2	1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0	တ ်	TETRACHLOROETHENE
B 5	B 5	B 5	B 5	0.7	<u> </u>	0.7	BENZENE
ם כ	2 5	ם כ	ב ב ב ב ב ב ב ב ב ב ב ב ב ב ב ב ב ב ב	1 7	<u> </u>	<u></u>	TRICHI OBOETHENE
B 5	B C	BD C	BDI	1.0	7 2 9 9	י וכ	1 1 1-TRICHI OROETHANE
B	B)	BD.	B	10	<u>.</u> .	וני	1 2/CIS)-DICHI OROFTHENE
BDL	BDL	BDL	BDL	1.1	<u>1</u> 0	5	1,2(TRANS)-DICHLOROETHENE
BDL	BDL	BDL	BDL	1.1		ڻ ن	1,1-DICHLOROETHANE
BDL	BDL		BDL	1.1	μ g/l	5	VINYL CHLORIDE
859134 862867	833114 853600	824142 837100	836525 839200	N N N N	GPD	MONITOR MONITOR	FLOW, DAILY AVG FLOW, DAILY MAX
09/24/01	09/18/01	09/11/01	09/04/01	MDL		LIMITATIONS	PARAMETER
WEEK 4	WEEK 3	WEEK 2	WEEK 1	COMPT	STINU	DISCHARGE	EFFLUENT

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ALUMINUM, TOTAL CHROMIUM, TOTAL	ARSENIC, TOTAL	NICKEL, TOTAL	SUM IRON & MANGANESE	MANGANESE, TOTAL	IRON, TOTAL	DIETHYL PHTHALATE	DIMETHYL PHTHALATE	DI-N-OCTYL PHTHALATE	BIS(2-ETHLHEXYL)PHTHALATE	PYRENE	FLUORENE	PHENANTHRENE	TOTAL VOCs	NAPHTHALENE	DIBROMOCHLOROMETHANE	DICHLOROBROMOMETHANE	CHLOROFORM	ACETONE	METHYL ETHYL KEYTONE	1,1-DICHLOROETHENE	o-XYLENE	m,p-XYLENE	TOLUENE	TETRACHLOROETHENE	BENZENE	TRICHLOROETHENE	,1,1-TRICHLOROETHANE	1,2(CIS)-DICHLOROETHENE	1,2(TRANS)-DICHLOROETHENE	I,1-DICHLOROETHANE	VINYL CHLORIDE	FLOW, DAILY AVG FLOW, DAILY MAX	PARAMETER	EFFLUENT
2000 50	50	2000	1000	600	600	50	50	50	4.3	50	50	50		10	50	50	7	50	50	ڻ ن	Ŋ	Οī	Ωı	51	0.7	10	σı	σı	Ŋ	Ω	თ	MONITOR MONITOR	LIMITATIONS	DISCHARGE
	μ g/l	μ g/l			μ g/l		µ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μ g/l	μg/l		µ g/l	і, g,	μg/l	μ g/l	μ g/l	μ g/l	μ <u>g/</u> l	μ g/l	μ g/l	GPD GPD		STINU
40.0 2.0	48.0	5.0	N P	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.7	0.7	0.9	1.1	10.0	10.0	1.2	1.3	2.4	1.2	1.2	0.7	1.7	1.4	1.0	<u>-1</u>	<u>.</u>	<u>-1</u>	N N	MDL	COMP'T
BDL BDL	BDL	3.0	1110.0	1030.0	80.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	809655 827100	10/02/01	WEEK 1
BDL BDL			1258.0				BDL	BDL	BDL	BDL	'	BDL	<u>'</u>			'		BDL	'			'		_	'	'	'	_	<u>'</u>			694671 704500	01	WEEK 2
BDL BDL	BDL	4.0	1400.0	1290.0	110.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BD_	BDL	BDL	BDL	BDL	BDL	BDL	BDL	764371 810300	10/16/01	WEEK 3
BDL BDL	BDL	6.0	1245.0	1090.0	155.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	738529 789900	10/23/01	WEEK 4
BB P	BDL	4.0	256.0	186.0	70.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	759357 790600	10/30/01	WEEK 5

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NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

NOVEMBER 2001

EFFLUENT	DISCHARGE	UNITS	COMPT	WEEK 1	WEEK 2	WEEK3	WEEK 4	WEEKS
PAHAMETER	UMITATIONS		MDt.	11/05/01	11/13/01	11/20/01	11/27/01	
FLOW, DAILY AVG	MONITOR	QdS	Ϋ́	789340	784900	786728	780757	
FLOW, DAILY MAX	MONITOR	Ob Cb	NA	796400	795800	794900	784600	
VINYL CHLORIDE	5	lg 1	1.1	TOB	BOL	BDL	BDL	
1,1-DICHLOROETHANE	ស	56 =	7.	BDL	ದ್ದ	BDL L	901	
1,2(TRANS)-DICHLOROETHENE	5	1 6 1	-:	BDL	BDL	BDL	BDL.	
1,2(CIS)-DICHLOROETHENE	5	76 11	1.0	BDL	BDL	BDL	108	
1,1,1-TRICHLOROETHANE	5	5	4.	305	BDL	BDL	Ē	
TRICHLOROETHENE	10	5	1.7	<u>8</u> 0	BDL	108	G	
BENZENE	0.7	5	0.7	BDL	BDL	300	808	
TETRACHLOROETHENE	S	<u>5</u>	1,2	BDL	BDI	2	28	
TOLUENE	5	5	1.2	BOL	100	뎞	9	
m,p-XYLENE	5	56 =	2.4	8DL	BDL	BOL	BDL	
o-XYLENE	2	76 n	1.3	BOL	BOL	BDL	301	
1,1-DICHLOROETHENE	ις	\5 ±	1.2	n G	90	BDL	6	
METHYL ETHYL KEYTONE	ଜ	<u>Б</u>	10.0	BDL	BD.	BOL	108	
ACETONE	S	V6 #	10.0	절	80	B DL	108 108	
CHLOHOFORM	7	5	1.1	BDI	BDL	807	BDI	
DICHLOROBROMOMETHANE	S	50 1	6.0	B D	BDL	BD ,	BDL	
DIBROMOCHLOROMETHANE	ß	8 6 1	0.7	90	8	BOL	BDL	
NAPHTHALENE	2	76 1	1.7	BDL	BDL	BDL	BDL	
TOTAL VOCs		l/6 n	0:0	108	BOL	0:0	BDL	
PHENANTHRENE	S	l _Q 1	1.0	BDL	BB	BDT	BDI	
FLUORENE	ß	Б	1.0	108	BOK	BDL	BDL	
PYRENE	ß	<u>2</u>	1.0	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	7 20 31	1.0	BDF	8DL	BDL	BDL	
DI-N-CX:1YL PHIHALATE	8	5 3	0.	BOA	BDL	3 <mark>0</mark> 6	BDL	•
DIMETHYL PHI HALA I E	8	50	1.0	B DF	BDF	BDI	BDL	
DIETHYL PHTHALATE	8	<mark>Б</mark> п	1.0	BDL	BDL	BDL	BDL	
HON, IOIAL	009	50	20	62.00	71.00	110.0	43.0	
MANGANESE, TOTAL	009	<u>5</u>	1.0	1220.0	1180.0	1290.0	1210.0	
SUM IHON & MANGANESE	1000	<u>Б</u>	ZA VA	1282.0	1251.0	1400.0	1253.0	0.0
NICKEL, ICIAL	2000	<u>চ</u>	5.0	4.0	3.0	4.0	3.0	
AHSENIC, TOTAL	20	y 6 ±	48.0	<u>1</u> 08	301	BDL	BDL	
ALUMINUM, IOTAL CHROMILIM TOTAL	2002	გ. ა.:	9.0	28.8	둺	301	8DL	-
	3		۲.۷	JUD	ויייי	DIVE	ביו	

OCTOBER 2001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 10/02/01	WEEK 2 10/09/01	WEEK 3 10/16/01	WEEK 4 10/23/01	WEEK 5 10/30/01
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A N A	809655 827100	694671 704500	764371 810300	738529 789900	759357 790600
VINYL CHLORIDE	2	l/g 1	-:	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	2	l/g n	Ξ:	BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	ľ⁄g π	Ξ:	BDL	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	2	l/g u	0.1	BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	2	l/g μ	4.	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	l/g n	1.7	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	l/g u	0.7	BDL	BDL	BDL	BDL	BDL
TOLLENE TOLLENE	ς τ	/6 H	<u>.</u> .	BDL BDL	BDL	80F	80F	BDL B
M.D-XYLENE	יזי כי) 1 =	i - C	200	25	3 2	<u></u>	7 2
o-XYLENE	Ω.) D		BDI	200	BD I		
1,1-DICHLOROETHENE	2) b	1.2	BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	l/g u	10.0	BDL	BDL	BDL	BDL	BDL
ACETONE	20	l/g 4	10.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	7	l/g u	-:	BDL	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/g n	0.7	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	l/g n	1.7	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs		∥g π	0.0	BDL	BDL	0.0	BDL	BDL
PHENANTHRENE	20	l/g u	1.0	BDL	BDL	BDL	N/A	BDL
FLUORENE	20	l/g n	0.0	BDL	BDL	BDL	A/N	BDL
	20	/g n	0	BDL	BDL	BDL	Α N	BDL
BIS(2-ETHLHEXYL)PHTHALATE	6.4	 /6 n 	0.0	BDL	BDL	BDL	A/N	BDL
DI-N-OCI YL PHI HALA I E	ე ე	- /б т	0. 0	BDL	BDL	BDL	V/N	BDL
DIMETAL FATANCE	<u>ک</u> د	76 z		ה ה	BDL BD.	80F	V S	BDL
IDON TOTAL	OC S	1/6 H	0.0	BUL	BDL	BDL	N/A	BDL
MANDANESE TOTAL	86))) 1	0.0	00.00	14000	10.0	155.0	0.07
MAINGAINESE, TOTAL	000	1/6 n :) <u>{</u>	1030.0	1130.0	1290.0	1090.0	186.0
NICKEL TOTAL	0000	5 6 3. :	ζ c 2 ư	0.00	0.000	1400.0	1245.0	256.0
ABSENIO TOTAL	200	กั วั	5 5	2 6	2.0	5. 9	0 0	0.4
ARSENIC, LOTAL	000	г б т :	0.84	2	0.27	BDL	BDL	BDL
CHROMIUM, TOTAL	2000	5 5 1. 11	2.0	BDL	BDL		BDL BDL	8DL
		,						1

SEPTEMBER 2001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 09/04/01	WEEK 2 09/11/01	WEEK 3 09/18/01	WEEK 4 09/24/01	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A N A N	836525 839200	824142 837100	833114 853600	859134 862867	
VINYL CHLORIDE	5	l/g n	1.1	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHANE	2		Ξ:	BDL	BDL	BDL	BDL	
1,2(TRANS)-DICHLOROETHENE	2	l/g μ	7:	BDL	BDL	BDL	BDL	
1,2(CIS)-DICHLOROETHENE	2	l/g 4	1.0	BDL	BDL	BDL	BDL	
1,1,1-TRICHLOROETHANE	2	l/g n	1.4	BDL	BDL	BDL	BDL	
TRICHLOROETHENE	10	l/g n	1.7	BDL	BDL	BDL	BDL	
BENZENE	0.7	l/g u	0.7	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	2	l/g 4	1.2	BDL	BDL	BDL	BDL	
TOLUENE	2	l/g 4	1.2	BDL	BDL	BDL	BDL	
m,p-XYLENE	2	l/g n	2.4	BDL	BDL	BDL	BDL	
o-XYLENE	2	/b n	1.3	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHENE	2	l/g u	1.2	BDL	BDL	BDL	BDL	
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	
ACETONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	
CHLOROFORM	7	l/g n		BDL	BDL	BDL	BDL	
DICHLOROBROMOMETHANE	20	l/g 4	6.0	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	20	l/g μ	0.7	BDL	BDL	BDL	BDL	
NAPHTHALENE	10	l/g μ	1.7	BDL	BDL	BDL	BDL	
TOTAL VOCs		l∕g μ	0.0	BDL	BDL	0.0	0.0	
PHENANTHRENE	20	∥/β π	1.0	BDL	BDL	BDL	BDL	
FLUORENE	20	/6 n	1.0	BDL	BDL	BDL	BDL	
PYRENE	20	/g n	1.0	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g μ	1.0	BDL	BDL	BDL	BDL	
DI-N-OCTYL PHTHALATE	20	/6 n	1.0	BDL	BDL	BDL	BDL	
DIMETHYL PHTHALATE	20	/в и	0.1	BDL	BDL	BDL	BDL	
DIETHYL PHTHALATE	20	μg/l	1.0	1.3	1.6	1.9	BDL	
IRON, TOTAL	009	l/g μ	2.0	63.00	124.00	81.0	0.09	
MANGANESE, TOTAL	009	/в н	1.0	78.0	87.0	82.0	77.0	
SUM IRON & MANGANESE	1000	l/g 1	Ϋ́	141.0	211.0	163.0	137.0	
NICKEL, TOTAL	2000	/б п	5.0	2.0	4.0	4.0	4.0	
ARSENIC, TOTAL	20	l/g 1	48.0	BDL	BDL	BDL	BDL	
ALUMINUM, TOTAL	2000	/6 n	40.0	BDL	BDL	80 80 80 80 80 80 80 80 80 80 80 80 80 8	BDL BDL	
UNIONI, LOTAL	ΩC	ועט א	Z.U	מער	מער	מער	BDL	

AUGUST 2001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 08/07/01	WEEK 2 08/14/01	WEEK 3 08/21/01	WEEK 4 08/28/01	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A A A	829443 837100	836600 827300	841029 849100	843700 846800	
VINYL CHLORIDE	2	l∕g μ	1.1	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHANE	2	l/g n		BDL	BDL	BDL	BDL	
1,2(TRANS)-DICHLOROETHENE	2	l/g n	1.1	BDL	BDL	BDL	BDL	
1,2(CIS)-DICHLOROETHENE	2	l/g 4	1.0	BDL	BDL	BDL	BDL	
1,1,1-TRICHLOROETHANE	2	l/g n	4.1	BDL	BDL	BDL	BDL	
TRICHLOROETHENE	9	l/g u	1.7	BDL	BDL	BDL	BDL	
BENZENE	0.7	l/g n	0.7	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	2]/g н	1.2	BDL	BDL	BDL	BDL	
TOLUENE	2	η/g η	1.2	BDL	BDL	BDL	BDL	
m,p-XYLENE	2	l/g u	2.4	BDL	BDL	BDL	BDL	
o-XYLENE	ა	l/g n	1.3	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHENE	2	l/g u	1.2	BDL	BDL	BDL	BDL	
METHYL ETHYL KEYTONE	20	l∕g μ	10.0	BDL	BDL	BDL	BDL	
ACETONE	20	l/g u	10.0	BDL	BDL	BDL	BDL	
CHLOROFORM	7	l/g n		BDL	BDL	BDL	BDL	
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	20	∥/g n	0.7	BDL	BDL	BDL	BDL	
NAPHTHALENE	10	η g/l	1.7	BDL	BDL	BDL	BDL	
TOTAL VOCs		l/g π	0.0	BDL	BDL	0.0	0.0	
PHENANTHRENE	20	l/g μ	1.0	BDL	BDL	BDL	BDL	
FLUORENE	20	l/g n	1.0	BDL	BDL	BDL	BDL	
PYRENE	20	l/g 4	0.1	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g n	1.0	BDL	BDL	BDL	BDL	
DI-N-OCTYL PHTHALATE	20	l/g ₁	1.0	BDL	BDL	BDL	BDL	
DIMETHYL PHTHALATE	20	l/g 4	1.0	BDL	BDL	BDL	BDL	
DIETHYL PHTHALATE	20	l/g π	1.0	BDL	BDL	BDL	BDL	
IRON, TOTAL	009	/6 n	2.0	79.00	46.00	0.69	0.09	
MANGANESE, TOTAL	009	l/g n	1.0	163.0	216.0	214.0	77.0	
SUM IRON & MANGANESE	1000	l/g n	۷ ۷	242.0	262.0	283.0	137.0	
NICKEL, TOTAL	2000	/6 n	5.0	5.0	5.0	5.0	4.0	
ARSENIC, TOTAL	20	l/g n	48.0	BDL	BDL	BDL	BDL	
ALUMINUM, TOTAL	2000	/g # :	40.0	104.0	1.0	8DL	BDL	
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JULY 2001

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS		WEEK 1 07/03/01	WEEK 2 07/10/01	WEEK 3 07/17/01	WEEK 4 07/24/01	WEEK 5 07/31/01
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A N A	831100 838600	831786 833067	827957 843600	829571 848800	832057 860100
VINYL CHLORIDE	2	l/g μ	l	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	2	l/g n		BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	l/g n		BDL	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	2	l/g 1		BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	2	/в н		BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	l/g n		BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	l/g n		BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	2	l/g n		BDL	BDL	BDL	BDL	BDL
TOLUENE	2	l/g n		BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	2	l/g n		BDL	BDL	BDL	BDL	BDL
o-XYLENE	2	l/g n		BDL	BDL	BDL	BDL	BDI
1,1-DICHLOROETHENE	2	l/g n		BDL	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	l/g 4		BDL	BDL	BDL	BDL	BDL
ACETONE	20	l/g n		BDL	BDL	BDL	BDL	BDL
CHLOROFORM	7	l/g n		BDL	BDL	BDL	BDL	BDI
DICHLOROBROMOMETHANE	20	и В		BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/g n		BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	10	/в п		BDL	BDL	BDL	BDL	BDL
TOTAL VOCs		l/g n		BDL	BDL	0.0	0.0	0.0
PHENANTHRENE	20	l/g 4		BDL	BDL	BDL	BDL	BDL
FLUORENE	20	_ /6 п		BDL	BDL	BDL	BDL	BDL
PYRENE	20	l/g n		BDL	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g n		BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l/g n		BDL	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	l/g n		BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	20	μg/l		BDL	BDL	BDL	BDL	BDL
IRON, TOTAL	009	l/g n		67.00	90.06	47.0	45.0	26.0
MANGANESE, TOTAL	009	/6 n		274.0	275.0	271.0	258.0	165.0
SUM IRON & MANGANESE	1000			341.0	365.0	318.0	303.0	221.0
NICKEL, IOTAL	2000	l/g n		0.9	2.0	0.9	5.0	5.0
ARSENIC, TOTAL	20	l/g n	•	BDL	BDL	BDL	BDL	BDL
ALUMINUM, IOTAL	2000	/б т :		BDL	BDL	8DL	<u>B</u>	12.0
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JUNE 2001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 06/05/01	WEEK 2 06/12/01	WEEK 3 06/19/01	WEEK 4 06/26/01	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	AN AN	828200 834800	804729 835400	795886 836400	833229 836300	
VINYL CHLORIDE	ıç ı	ľ/6 rl	1.1	BDL	BDL	BDL	BDL	
1,1-DICHLOROE I HANE	Ω II	/g ::	: ;	BDL P	BDL	BD 1	BDL	
1.2(CIS)-DICHLOROETHENE	ი ი			BD.	BDI BDI	80 80	BDL BDL	
1,1,1-TRICHLOROETHANE	2		5 4	BDL	BDL	BDI	BD [
TRICHLOROETHENE	9	l/g r	1.7	BDL	BDL	BDL	BDL	
BENZENE	0.7	l/g n	0.7	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	ហ	ľ/g n	2.2	BDL	BDL	BDL	BDL	
I OLOENE B P-XXI ENE	ດ ແ	/b 1	7.5	8D 6	BDL	BDL	BDL	
II,P-X-IEI	າດ))))	4.7 4.0	2 E	BUL	2 Z	BDL	
1,1-DICHLOROETHENE	2) D H	5 5	80 10	20 20	2 2	7 2	
METHYL ETHYL KEYTONE	20	 	10.0	BDL	BDL	BDL	BDL	
ACETONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	
CHLOROFORM	7	/6 n	1:1	BDL	BDL	BDL	BDL	
DICHLOROBROMOMETHANE	20	/6 n	6.0	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	20	/6 n	0.7	BDL	BDL	BDL	BDL	
NAPHTHALENE	10	l/g n	1.7	BDL	BDL	BDL	BDL	
TOTAL VOCs		µ g/I	0.0	BDL	BDL	0.0	0.0	
PHENANTHRENE	20	/6 n	1.0	BDL	BDL	BDL	BDL	
FLUORENE	20	/6 rl	1.0	BDL	BDL	BDL	BDL	
PYRENE	20	/g n	1.0	BDL	BDL	BDL	BDL	
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g n	1.0	BDL	BDL	BDL	BDL	
DI-N-OCI YL PHIHALAIE	20]/б п	1.0	BDL	BDL	BDL	BDL	
DIMETHYL PHIHALATE	20	l/g u	1.0	BDL	BDL	BDL	BDL	
DIETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDL	
IHON, IOIAL	009	l/6 п	2.0	122.00	90.00	114.0	65.0	
MANGANESE, IOTAL	009]/б п	1.0	273.0	310.0	276.0	274.0	
SOM ITON & MANGANESE	1000]/б т	٧	395.0	400.0	390.0	339.0	
NICKEL, IOIAL	2000]/6 n	5.0	0.9	2.0	0.9	0.9	
AHSENIC, IOTAL	20]/б т	48.0	BDL	BDL	11.0	BDL	
CHROMILIM TOTAL	2000	/b 1	40.0	BDL	BDL	BDL P. I.	BDF	
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MAY 2001

EFFLUENT PARAMETER	DISCHARGE	UNITS	COMP'T MDL	WEEK 1 05/01/01	WEEK 2 05/08/01	WEEK 3 05/15/01	WEEK 4* 05/22/01	week 5 05/29/01
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A A A	802400 815500	794972 812300	800500 839300	832343 832600	631471 841933
VINYL CHLORIDE	2	l/g u	1.1	BDL	BDL	BDL		BDL
1,1-DICHLOROETHANE	2		Ξ:	BDL	BDL	BDL		BDL
1,2(TRANS)-DICHLOROETHENE	2	/6 т	-	BDL	BDL	BDL		BDL
1,2(CIS)-DICHLOROETHENE	2	l∕g μ	1.0	BDL	BDL	BDL		BDL
1,1,1-TRICHLOROETHANE	ß	l/g 4	4.	BDL	BDL	BDL		BDL
TRICHLOROETHENE	9	/b т	1.7	BDL	BDL	BDL		BDL
BENZENE	0.7	/6 и	0.7	BDL	BDL	BDL		BDL
TETRACHLOROETHENE	2	l∕g μ	1.2	BDL	BDL	BDL		BDL
TOLUENE	2	/6 т	1.2	BDL	BDL	BDL		BDL
m,p-XYLENE	2	/6 и	2.4	BDL	BDL	BDL		BDL
o-XYLENE	2	l∕g ₁	د .	BDL	BDL	BDL		BDL
1,1-DICHLOROETHENE	2	l/g 4	1.2	BDL	BDL	BDL		BDL
METHYL ETHYL KEYTONE	20	l/в 4	10.0	BDL	BDL	BDL		BDL
ACETONE	20	/6 n	10.0	BDL	BDL	BDL		BDL
CHLOROFORM	7	l∕g ₁	- :	BDL	BDL	BDL		BDL
DICHLOROBROMOMETHANE	20	l/g 4	6.0	BDL	BDL	BDL		BDL
DIBROMOCHLOROMETHANE	20	l/6 т	0.7	BDL	BDL	BDL		BDL
NAPHTHALENE	10	/6 n	1.7	BDL	BDL	BDL		BDL
TOTAL VOCs		l/g n	0.0	BDL	BDL	0.0		0.0
PHENANTHRENE	20	/6 n	1.0	TOB	BDL	BDL		BDL
FLUORENE	20	l/g 4	1.0	BDL	BDL	BDL		BDL
PYRENE	20	l/g 4	0.	BDL	BDL	BDL		BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g 4	1.0	BDL	BDL	BDL		BDL
DI-N-OCTYL PHTHALATE	20		1.0	BDL	BDL	BDL		BDL
DIMETHYL PHTHALATE	20	l∕g μ	1.0	BDL	BDL	BDL		BDL
DIETHYL PHTHALATE	50	μ g/l	1.0	BDL	BDL	BDL		BDL
IRON, TOTAL	009	/6 n	2.0	113.00	39.00	71.0		108.0
MANGANESE, TOTAL	009	l/g 4	1.0	217.0	209.0	246.0		295.0
SUM IRON & MANGANESE	1000	l/g 4	Ϋ́	330.0	248.0	317.0		403.0
NICKEL, TOTAL	2000	l/g 4	5.0	5.0	5.0	5.0		0.9
ARSENIC, TOTAL	20	l/g u	48.0	BDL	BDL	BDL		BDL
ALUMINUM, TOTAL CHROMIUM, TOTAL	2000	/6 n	40.0	13.0	BDL BD	80L		16.0 ICR
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^{*} Laboratory report currently unavailable.

APRIL 2001

WEEK 5																																	
WEEK 4 04/25/01	561000 813500	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	400.0	241.0	641.0	0.9	BDL	13.0 BDL
WEEK 3 04/17/01	405234 514900	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	264.0	308.0	572.0	0.9	BDL	BDL BDL
WEEK 2*																																	
WEEK 1*							٠;																										
COMP'T MDL	A A A	1.1	1.0	4.1	1.7	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0		6.0	0.7	1.7	0.0	1.0	1.0	0.1	1.0	1.0	1.0	1.0	2.0	1.0	Ϋ́	5.0	48.0	40.0 2.0
UNITS	GPD GPD	l/g μ	l∕g μ	l/g u	l/g H	l/g n	l/g n	l/g n	l∕g μ	/g n	l/g n	√g n	μg/l	l/g n	l/g n	/b n	/g n	l∕g ₁	l/g u	l∕g n	l/g μ	l/g 4			l/g n			l/g ц		l/g 4		l/g 4	/б т т
DISCHARGE	MONITOR	5	2	ro r	2	2	10	0.7	2	2	2	2	2	20	20	7	20	20	10		20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000 50
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHENE	1,2(CIS)-DICHLOHOETHENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHENE	BENZENE	TETRACHLOROETHENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	TOTAL VOCs	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, TOTAL CHROMIUM, TOTAL

^{*} Plant shut down due to failure of noise supression insulation on blower duct work.

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 03/07/01	WEEK 2 03/13/01	WEEK3* 03/14/01	WEEK4*	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	A N	540772 550900	537100	234200		
VINYL CHLORIDE	2	l/6 n	1.1	BDL	BDL)		
1,1-DICHLOROETHANE	2	l/g n	1.1	BDL	BDL			
1,2(TRANS)-DICHLOROETHYLENE	വ	l/g μ		BDL	BDL			
1,2(CIS)-DICHLOROETHYLENE	വ	l/g μ	1.0	BDL	BDL	_		
1,1,1-TRICHLOROETHANE	2	l/g n	1.4	BDL	BDL			
TRICHLOROETHYLENE	10	l/g н	1.7	BDL	BDL			
BENZENE	0.7	/6 n	0.7	BDL	BDL			
TETRACHLOROETHYLENE	2	/6 н	1.2	BDL	BDL			
TOLUENE	വ	/6 н	1.2	BDL	BDL			
m,p-XYLENE	വ	l/g ų	2.4	BDL	BDL			
o-XYLENE	വ	l∕g μ	1.3	BDL	BDL	-		
1,1-DICHLOROETHENE	2	η g/l	1.2	BDL	BDL			
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL			-
ACETONE	20	l/g n	10.0	BDL	BDL			
CHLOROFORM	7	/б п	1.1	BDL	BDL			
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	-		
DIBROMOCHLOROMETHANE	20	/6 n	0.7	BDL	BDL			
NAPHTHALENE	9	/6 n	1.7	BDL	BDL			
PHENANTHRENE	20	l/g μ	1.0	BDL	BDL			
FLUORENE	20	/в н	1.0	BDL	BDL	_		
PYRENE	20	l/g ц	1.0	BDL	BDL			
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g ц	1.0	BDL	BDL			
DI-N-OCTYL PHTHALATE	20	l/g n	1.0	BDL	BDL			
DIMETHYL PHTHALATE	20	/6 н	1.0	BDL	BDL			_
DIETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL			
IRON, TOTAL	009	l/g n	2.0	145.0	20.0			
MANGANESE, TOTAL	009	/b n	1.0	296.0	198.0			
SUM IRON & MANGANESE	1000	l/g μ	ΑN	441.0	248.0			
NICKEL, TOTAL	2000	l/g μ	5.0	4.0	2.0			
ARSENIC, TOTAL	20	" р п	48.0	8.0	BDL			
ALUMINUM, IOTAL	2000	/g н	40.0		0.6			
CHROMIUM, I OI AL		l/b n	Z:0 =	BDL	BDL	=		

^{*} Plant shut down due to failure of noise supression insulation on blower duct work.

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK 5	
WEEK4 02/27/01	659601 712267 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL
WEEK3 02/21/01	675086 708800 800 801 801 801 801 801 801 801 80
WEEK 2 02/14/01	665800 667700 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL
WEEK 1 02/07/01	664915 680900 BDL BDL BDL BDL BDL BDL BDL BDL
COMP'T MDL	NA NA 1.1.1
UNITS	00 00 00 00 00 00 00 00 00 00 00 00 00
DISCHARGE LIMITATIONS	MONITOR MONITOR 5 5 10 0.7 5 50 50 50 50 50 600 600 2000 50 50 50 50 50 50 50 50 50 50 50 50
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX VINYL CHLORIDE 1,1-DICHLOROETHANE 1,2(TRANS)-DICHLOROETHYLENE 1,2(CIS)-DICHLOROETHYLENE 1,1,1-TRICHLOROETHYLENE TRICHLOROETHYLENE TRICHLOROETHYLENE TRICHLOROETHYLENE TRICHLOROETHYLENE TOLUENE m.p-XYLENE O-XYLENE O-XYLENE O-XYLENE O-XYLENE O-XYLENE TOLUGNE METHYL ETHYL KEYTONE ACETONE CHLOROFORM DICHLOROBROMOMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DICHLOROBROMOMETHANE DIBROMOCHLOROMETHANE NAPHTHALATE DICHLOROBROMOMETHANE DICHLOROBROMOMETHANE SUCHORENE BIS(2-ETHLHEXYL)PHTHALATE DIETHYL PHTHALATE

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

	_		_		_		_				_		_		_		_					_			_	_			_	_		
WEEK 5 01/30/01	627167	981000 BDI	BDI	BDL	7.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDI	BDL	BDL	BDI	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	29.0	635.0	664.0	0.9	BDL	BDL BD
WEEK4 01/25/01	537363	00000	BDL	BDL	5.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	45.0	991.0	1036.0	0.9	BDL	BDL BDI
WEEK3 01/17/01	666438	903300 RDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	27.0	678.0	105.0	0.9	BDL	BDL BDI
WEEK 2 01/09/01	665286	903 108 108	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	24.0	462.0	486.0	2.0	10.0	BDL BDL
WEEK 1 01/03/01	678067	80 IO	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	22.0	549.0	571.0	3.0	BDL	8DL 8DL
COMP'T MDL	∀	<u> </u>	-	1.	1.0	1.4	1.7	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0	1.1	6.0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	ΑΝ	2.0	48.0	40.0 2.0
UNITS	GPD	2 <u>-</u>	/6 n	l/g π	l/g n	l/g n	l/g n	l/g π	l/g n	l/g n	l/g n	η g/l	l/g n	l/g n	1/6 n	/б п]/b n	l/g n	l/g n	η g/l	l/g π	l/g n	l/g n	l/g n	l/g n	l/в ц	l/g n	l/g η	l/в ц	l/в ц	/в н	_ П п п
DISCHARGE LIMITATIONS	MONITOR	22	2	5	2	2	10	0.7	2	2	2	2	5	20	20	7	20	20	10	20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000
EFFLUENT PARAMETER	FLOW, DAILY AVG	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHYLENE	BENZENE	TETRACHLOROETHYLENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, I O I AL CHROMIUM, TOTAL

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

GPD NA 77163 680986 674140 ц у д (д (EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 12/08/00	WEEK 2 12/15/00	WEEK3 12/20/00	WEEK4 12/28/00	WEEK 5
FTHYLENE 5 μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ	.Y AVG .Y MAX	MONITOR	GPD GPD	N N A	771163	680986	674140	£96269 **	
FTHYLENE 5	ORIDE	2	l/g n	1:1	BDL	BDL	BDL	BDL	
NE 1.1 BDL BDL	ROETHANE	Ω	l/g rt	1.1	BDL	BDL	BDL	BDL	
NEWER 5	J-DICHLOROETHYLENE	ıcı		- -	BDL	BDL	BDL	BDL	
NE 10 μg/η 1.7 BDL	CHLOROETHYLENE	ر در	l/g u	1.0	BDL	BDL	BDL	BDL	
NE 5 μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ	ALOROE I HANE	ი \$	l/g u	4.1	BDL	BDL	BDL	BDL	
5 μ μ/γ 1.2 BDL BDL <td>OEINTLENE</td> <td>010</td> <td> /6 n</td> <td>1.7</td> <td>80F</td> <td>BDL</td> <td>80 1</td> <td>BDL</td> <td></td>	OEINTLENE	010	/6 n	1.7	80F	BDL	80 1	BDL	
5 μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ	TIME STIFFTORD); ·	l of	\ O \	BDL Bi	BDL	BDL	BDL	
5 μg/μ 1.2 BDL BDL <td>ONOEINTLEINE</td> <td>n .</td> <td>l/g u</td> <td>27.0</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>	ONOEINTLEINE	n .	l/g u	27.0	BDL	BDL	BDL	BDL	
5 μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ	Ļ	o 1	L/g ¤	7.5	BDL	BDL	BDL	BDL	
5 μ g/l 1.3 BDL BDL <td>Ш</td> <td>ر د</td> <td>J/g n</td> <td>2.4</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>	Ш	ر د	J/g n	2.4	BDL	BDL	BDL	BDL	
5 μ g/l 1.2 BDL BDL BDL BDL BDL 50 μ g/l 10.0 BDL BDL <td></td> <td>- د</td> <td>/6 1</td> <td> </td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>		- د	/6 1	 	BDL	BDL	BDL	BDL	
50 μg/l 10.0 BDL BDL </td <td>DROETHENE</td> <td>2</td> <td>l/g μ</td> <td>1.2</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>	DROETHENE	2	l/g μ	1.2	BDL	BDL	BDL	BDL	
50 μ g/l 10.0 BDL BDL<	THYL KEYTONE	20	l/g u	10.0	BDL	BDL	BDL	BDL	
7 μg/l 1.1 BDL BDL <td></td> <td>20</td> <td>l/g n</td> <td>10.0</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>		20	l/g n	10.0	BDL	BDL	BDL	BDL	
50 μ g/l 0.9 BDL BDL BDL BDL 50 μ g/l 1.7 BDL BDL <td>ORM</td> <td>7</td> <td>l/g n</td> <td>1.1</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>	ORM	7	l/g n	1.1	BDL	BDL	BDL	BDL	
50 μ g/l 0.7 BDL BDL </td <td>BROMOMETHANE</td> <td>20</td> <td>l/g n</td> <td>6.0</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>	BROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL	BDL	
10 μg/l 1.7 BDL	CHLOROMETHANE	20	l/g n	0.7	BDL	BDL	BDL	BDL	
50 μ g/l 1.0 BDL BDL </td <td>ENE.</td> <td>9</td> <td>/б п</td> <td>1.7</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>	ENE.	9	/б п	1.7	BDL	BDL	BDL	BDL	
50 μ g/l 1.0 BDL A2.0	TRENE	20	l/g n	1.0	BDL	BDL	BDL	BDL	
50 μ g/l 1.0 BDL BDL </td <td>Irl I</td> <td>20</td> <td>l/g n</td> <td>1.0</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td></td>	Irl I	20	l/g n	1.0	BDL	BDL	BDL	BDL	
4.3 μ g/l 1.0 BDL BDL <		20	/6 n	0.1	BDL	BDL	BDL	BDL	
50 μ g/l 1.0 BDL BDL </td <td>LHEXYL)PHTHALATE</td> <td>4.3</td> <td>l/g u</td> <td>1.0</td> <td>BDL</td> <td>BDL</td> <td>BDL</td> <td>BDI</td> <td></td>	LHEXYL)PHTHALATE	4.3	l/g u	1.0	BDL	BDL	BDL	BDI	
SE μg/l 1.0 BDL	'L PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDI	
50	. PHTHALATE	20		1.0	BDL	BDL	BDL	BDI	
- 600 μ g/l 2.0 39.0 563.0 42.0 600 μ g/l 1.0 70.0 186.0 288.0 2000 μ g/l NA 109.0 749.0 288.0 2000 μ g/l 5.0 4.0 6.0 4.0 50 μ g/l 48.0 BDL BDL BDL BDL 50 μ g/l 40.0 BDL BDL BDL BDL 50 μ g/l 2.0 BDL BDL BDL BDL 50 μ g/l 2.0 BDL BDL BDL BDL	HTHALATE	20		1.0	1.4	BDL	BDL	BD.	
NESE 600 μg/l 1.0 70.0 186.0 288.0 288.0 280.0 μg/l NA 109.0 749.0 330.0 4.0 5.0 μg/l 48.0 BDL	AL	009		2.0	39.0	563.0	42.0		
ANESE 1000 μg/l NA 109.0 749.0 330.0 2000 μg/l 5.0 4.0 6.0 4.0 8DL	SE, TOTAL	009		1.0	70.0	186.0	288.0	478.0	
2000 μg/l 5.0 4.0 6.0 4.0 BDL 5.0 μg/l 48.0 BDL	& MANGANESE	1000		ΑN	109.0	749.0	330.0	504 0	
50 μg/l 48.0 BDL	DTAL	2000		5.0	4.0	0.9	4.0	5.0	
2000 μg/l 40.0 BDL 10.0 BDL 50 μg/l 2.0 BDL BDL BDL	TOTAL	20		48.0	BDL	BDL			
	1, TOTAL	2000		40.0	BDL	10.0	BDL	BDL	
	M, TOTAL			2.0	BDL	BDL	BDL	BDL	

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 11/07/00	WEEK 2 11/14/00	WEEK3 11/21/00	WEEK4 11/28/00	WEEK 5
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	NA NA	905514 936300	920771	921300 939700	806014 913400	
VINYL CHLORIDE	2	/в н	1.1	BDL	BDL	BDL		
1,1-DICHLOROETHANE	ഗ	ľв н	-	BDL	BDL	BDL		
1,2(1 KANS)-DICHLOROETHYLENE	ນດນ		- -	BDL	BDL	BDL		
1.1.1-TRICHLOROETHANE	יז כ	, , , ,). L	ש הם הם	ם מ	ם הם		
TRICHLOROETHYLENE	, C	ה א ה א	1.7	BDL	BDL	BDL	_	
BENZENE	0.7	/б n	0.7	BDL	BDL	BDL		
TETRACHLOROETHYLENE	2	l/g n	1.2	BDL	BDL	BDL		-
TOLUENE	S	l/g μ	1.2	BDL	BDL	BDL		
m,p-XYLENE	2	/в и	2.4	BDL	BDL	BDL		
o-XYLENE	2	l/в ц	1.3	BDL	BDL	BDL		
1,1-DICHLOROETHENE	2	l⁄g η	1.2	BDL	BDL	BDL		
METHYL ETHYL KEYTONE	20	/в н	10.0	BDL	BDL	BDL		= =
ACETONE	20	/в п	10.0	BDL	BDL	BDL		
CHLOROFORM	7	l∕g μ	1:1	BDL	BDL	BDL		
DICHLOROBROMOMETHANE	20	/b и	6.0	BDL	BDL	BDL		
DIBROMOCHLOROMETHANE	20	/в н	0.7	BDL	BDL	BDL		
NAPHTHALENE	9	/в _й	1.7	BDL	BDL	BDL		
PHENANTHRENE	20	/в н	1.0	BDL	BDL	BDL		
FLUORENE	20	l/g ц	1.0	BDL	BDL	BDL		
PYRENE	20	l∕g ₁	1.0	BDL	BDL	BDL		-
BIS(2-ETHLHEXYL)PHTHALATE	4.3	/в н	1.0	BDL	BDL	BDL		
DI-N-OCTYL PHTHALATE	20	_ l/g น	1.0	BDL	BDL	BDL		_
DIMETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL		
DIETHYL PHTHALATE	20	l/g μ	1.0	BDL	BDL	BDL		
IRON, TOTAL	009	l/g n	2.0	120.0	45.0	49.0	31.0	
MANGANESE, TOTAL	009	l/g u	1.0	78.0	68.0	84.0	71.0	
SUM IRON & MANGANESE	1000	/б п	ΝΑ	198.0	113.0	133.0	102.0	
NICKEL, TOTAL	2000	l/g n	2.0	2.0	5.0	5.0	1.0	
ARSENIC, TOTAL	20	/в н	48.0	BDL	8.0		BDL	
ALUMINUM, TOTAL	2000	/в н	40.0	11.0	BDL	BDL	BDL	
CHROMIUM, TOTAL	20	µ д/I	2.0	1.0	BDL	BDL	BDL	
NOTE: VOLATILE AND SEMI-VOLATILE RESULTS NOT AVAILABLE	RESULTS NOT AVA		11/28/00 DUE	FOR 11/28/00 DUE TO LABORATORY	RY EQUIPMEN	EQUIPMENT FAILURE.		

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 10/03/00	WEEK 2 10/11/00	WEEK3 10/17/00	WEEK4 10/24/00	WEEK 5 10/31/00
FLOW, DAILY AVG FLOW, DAILY MAX	MONITOR	GPD GPD	N A A A	911933 942350	950 <u>912</u> 975700	944717	938686	921829
VINYL CHLORIDE	2	l/g η	1.1	BDL	BDL	BDL	BDL	BDL
,1-DICHLOROETHANE	22	l/g μ	-	BDL	BDL	BDL	BDL	BDL
,2(TRANS)-DICHLOROETHYLENE	2	/6 н	- -	BDL	BDL	BDL	BDL	BDL
,2(CIS)-DICHLOROETHYLENE	2	/6 n	0.1	BDL	BDL	BDL	BDL	BDL
,1,1-TRICHLOROETHANE	2	l/g μ	4.1	BDL	BDL	BDL	BDL	BDL
RICHLOROETHYLENE	우	l/g ц	1.7	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	l/в ц	0.7	BDL	BDL	BDL	BDL	BDL
ETRACHLOROETHYLENE	2	l∕g μ	1.2	BDL	BDL	BDL	BDL	BDL
TOLUENE	2	l/g n'	1.2	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	2	/6 n	2.4	BDL	BDL	BDL	BDL	BDL
o-XYLENE	2	l l/g n	6.1	BDL	BDL	BDL	BDL	BDL
,1-DICHLOROETHENE	2	/6 n	1.2	BDL	BDI.	BDL	BDL	BDI
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	BDL
ACETONE	20	l/g n	10.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	7	l/g ц		BDL	BDL	BDL	BDL	BDI
DICHLOROBROMOMETHANE	20	/b п	6.0	BDL	BDI.	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l/g n	0.7	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	9	l/g 14	1.7	BDL	BDL	BDL	BDL	BDL
PHENANTHRENE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
FLUORENE	20	l/g ₁	1.0	BDL	BDL	BDL	BDL	BDL
PYRENE	22	l/g n	1.0	BDL	BDI.	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	l/g n	1.0	BDL	BDI.	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDL	BDL
RON, TOTAL	009	l/g n	2.0	35.0	45.0	49.0	53.0	148.0
MANGANESE, TOTAL	009	l/g и	1.0	62.0	64.0	67.0	0.99	0.69
SUM IRON & MANGANESE	1000	l/g n	ΑN	97.0	109.0	116.0	119.0	217.0
NICKEL, TOTAL	2000	/6 n	5.0	4.0	3.0	3.0	3.0	3.0
ARSENIC, TOTAL	20	 /6 n	48.0	BDL	BDL	BDL	BDL	BDL
ALDIMINUM, IOTAL	7000	l/g n	40.0	5.0	10.0	36.0	21.0	28.0
CHROMIUM, IOTAL	 0c 	/6 ท	2.0	BDL	BDI.	BDL	BDL	BDL

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

	_				_														_	_						_		_				
WEEK 5																												0.0				
WEEK4 09/25/00	938380	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	85 E	BDI	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.2	37.0	61.0	98.0	4.0	BDL	12.0	BDL
WEEK3 09/21/00	880911	BDL	BDL	BDL	BDL	BDL	BDL	BDL			BDI	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	38.0	65.0	103.0	4.0		BDL	BDL
WEEK 2 09/12/00	981357	BDL	BDL	BDL	BDL	BDL	BDL	BDL	ם מ	BDI	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20.0	73.0	123.0	2.0	BDL	91.0	BDL
WEEK 1 09/05/00	996300	BDL	BDL	BDL	BDL	BDL	BDL	BDL	ש המ	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	242.0	28.0	300.0	4.0	0.9	24.0	BDL
COMP'T MDL	A Z		1.1	. .	1.0	4.1	1.7	0.7	<u>, г</u>	4:2	1.3	1.2	10.0	10.0	7:	6.0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	0.1	1.0	2.0	1.0	AA	5.0	48.0	40.0	2.0
UNITS	GPD GPD	μg/l	l/g ų	ј, В ц	l β μ	μg/l	ј [°] в н	l/g u		- /b 14	/b n	п	l/b n	/б т	l/b n	/в́ н	η g/l	l/g n	l/g μ	η g/l	η βη	l⁄g μ	l/g n	l/g n	l/g μ	l∕g μ	l/g μ	l/g μ	l/g μ	ľg n	l/g n	/6 1
DISCHARGE LIMITATIONS	MONITOR	2	2	2	5	2	10	0.7	יא כ	. to	2	2	20	20	7	20	20	9	20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000	
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-I RICHLOROE I HANE	IMICHLOROETHYLENE	BENZENE TETBACHI OBOETHVI ENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHIHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, IOTAL	CHROMIUM, IOIAL

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

200	1/2	2							_																	55.0	0.09	15.0	4.0	1.0	7.0
WEEK 5 08/29/00	10007	1020300 IOR IOR	BDL	BDL	BDL	BDL	BDL BB	2 G	מ ב	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	ц) —	9	=		_	
WEEK4 08/22/00	932557	1016300 RDI	BDL	BDL	BDL	BDL	BDL	ביים היים		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	79.0	70.0	149.0	3.0	14.0	21.0
WEEK3 08/15/00	585129	BDI	BDL	BDL	BDL	BDL	BDL	פטר	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	21.0	62.0	83.0	3.0	11.0	11.0
WEEK 2 08/08/00	542120	BDI	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	92.0	74.0	166.0	3.0	BDL	11.0
WEEK 1 08/03/00	370156	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	41.0	103.0	144.0	4.0	BDL	72.0
COMP'T MDL	NA A	-	1.1	1.1	1.0	4.1	1.7	. · ·	<u> </u>	2.4	1.3	1.2	10.0	10.0		6.0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	NA	2.0	48.0	40.0
UNITS	GPD) /o		ľ6 п	/6 н		уб т. :		- 5 b 1. 1		l/g 11	l/g n	l/g n	l∕g μ	l/g n	l/g n	l/g ц	l/g ц	µ д/I	h g/l	/в н	/в и	µ д/I	/в н	l/g ц	/б т	l/g ц	l/g ц	/b n	ľg n	ار 1/6 تا
DISCHARGE LIMITATIONS	MONITOR	2	2	2	2	ഹ (10		o ro	2	2	5	20	20	7	20	20	우	20	20	20	4.3	20	20	20	009	009	1000	2000	50	2000
EFFLUENT PARAMETER	FLOW, DAILY AVG	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-1 RICHLOROETHANE	IRICHLOROEIHYLENE BENZENE	TETBACHI OBOETHVI ENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYKENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, IOLAL

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK 5			_		_																									
WEEK4 07/25/00	600557 601800	BDL	BDL	BDI	BDL	BDL	BDL BDI	80	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	39.0	0.99	105.0	4.0	BDL	22.0 BDL
WEEK3 07/18/00	519457 603800	BDL	80	BDL	BDL	BDL	80F		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	97.0	73.0	170.0	3.0	BDL	80L 80L
WEEK 2 07/11/00	539383 540800	BDL	80F	BDL	BDL	BDL	80F	BOL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	101.0	237.0	338.0	2.0	BDL	16.0 BDL
WEEK 1 07/05/00	531038 591700	BDL	BDL	80F	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	194.0	197.0	391.0	4.0	BDL	31.0 BDL
COMP'T MDL	NA NA	<u>:</u>	- -	- 0	1.4	1.7	1.0	1.2	2.4	1.3	1.2	10.0	10.0	- :	6.0	0.7	1.7	0:1	1.0	0.	1.0	1.0	1.0	1.0	2.0	1.0	ΑΝ	5.0	48.0	40.0 2.0
UNITS	GPD GPD	√6 π	/b :	5 5 1 1		l/g u	Б т. :	, b	V6 n	√6 n	l/g n	√6 π	√g n	√g π	√g π	√g n	√g π	l∕g μ		μg π	√6 π			l/g n				l/g ¤		ಸ ಸ ಶ ಶ
DISCHARGE LIMITATIONS	MONITOR	ري ر	w u	ດທ	2	10). c	വ	2	2	വ	20	20	7	20	20	9	20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE 1,7-TRANS)-DICHLOROETHYI ENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHYLENE	DEINZEINE TETBACHI OBOETHYI FNE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, IOTAL CHROMIUM, TOTAL

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK 5									_													_						_	
WEEK4 06/27/00	539657 584500	BDL	BDL	BDL	BDL	BDL	BDI	BDL	BDL	BDL	BDL	<u></u>		BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	436.0	105.0	541.0	4.0	BDL	BDL BDL
WEEK3 06/20/00	567929 628900	80F	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	80F	2 2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	92.0	76.0	168.0	2.0		BOL
WEEK 2 06/13/00	312933 632300	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDI BDI	2 2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	89.0	87.0	176.0	4.0	BDL	BDL
WEEK 1 06/07/00	627343 652934	BDL	90,	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2 2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	109.0	80.0	189.0	4.0	BDL	BDL
COMP'T MDL	N A		: <u>;</u>	1.0	4.1	7.L 0.7	1.2	1.2	2.4	ا ن	10.0	10.0	1.1	0.9	0.7	1.7	1.0	1.0	1.0	0.5	0.0	1.0	1.0	2.0	1.0	Ϋ́	2.0	48.0	2.0
UNITS	GPD GPD		5 5 1 1		ľg n	т =	, b	l/g n	ľg n	l/g n	5 5 H =	,	ה ה ה	/6 n	l∕g μ	√6 n	l/g μ	μ g'	ľg μ	l/g u	ι⁄δ π	h g/l	л В д	l/g u	/в н		l/g ⊐		м 1 1/6 1/6
DISCHARGE LIMITATIONS	MONITOR		വ	2	2	0.7	2	2	ıc ı	ი .	. O	200	7	20	20	9	20	20	၀ (ε.4 Σ. α	റ ദ	00 1	20	009	009	1000	2000	200	2007
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE 1 1-DICHI OBOETHANE	1,2(TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-TRICHLOROETHANE	BENZENE	TETRACHLOROETHYLENE	TOLUENE	m,p-XYLENE	0-ATLEINE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYKENE DIOMO ITTILI III III VALITI I ALI ATTI	BIS(Z-ELHLHEXYL)PHIHALATE	DI-IV-OCITE PRI INFERIE	DIME I HYL PH I HALA I E	DIETHYL PHTHALATE	HON, IOIAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, IOIAL	ARSENIC, IOTAL	CHROMIUM, TOTAL

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK 5 05/30/00	399896	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	109.0	97.0	206.0	4.0	BDL	5.0 BDL
WEEK4 05/24/00	392245 414285	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.66	102.0	201.0	5.0		
WEEK3 05/16/00	403629	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	655.0	207.0	862.0	4.0	BDL	BDL BDL
WEEK 2 05/09/00	390010 392802	BDL	BDL	BDL	BDL	BDL	BDL	BDL	ВОГ	ВОГ	BDL	ВОГ	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	303.0	70.0	373.0	0.9	BDL	6.0 12.0
WEEK 1 05/02/00	305738 395881	BDL	BDL	BDL	BDL	BDL	BDL	ВОГ	BDL	ВОГ	BDL	ВОГ	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1130.0	102.0	1232.0	3.0	BDL 99.	BOL
COMP'T MDL	NA NA	1.1	1.1	1.1	1.0	4.1	1.7	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0	1:1	6:0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	Ϋ́	5.0	48.0	2.0
UNITS	GPD GPD	/g n	l∕g μ	l∕g μ	l⁄g μ	l∕g μ	/β π	l∕g μ	l∕g μ	l∕g μ	l∕g μ	l∕g μ	√6 n	l∕g μ	Ο,	٠,	٠,	٠,	0	٠,	l∕g μ	٠,	Ο,	٠,	٠,	٠,	0,	٠,	٠,	٠,	٠,	, , , , , ,
DISCHARGE LIMITATIONS	MONITOR	2	വ	വ	2	2	9	0.7	2	2	ഹ	2	2	20	20	7	20	20	10	20	20	20	4.3	20	20	20	009	009	1000	2000	50	2002
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHYLENE	BENZENE	TETRACHLOROETHYLENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	CHROMIUM, TOTAL

*PLANT INFLUENT CONCENTRATION 316 μ g/I. HIGH EFFLUENT CONCENTRATION MUST BE A RESULT OF SAMPLE CONTAMINATION.

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 04/04/00	WEEK 2 04/11/00	WEEK3 04/17/00	WEEK4 04/24/00	WEEK 5
FLOW, DAILY AVG	MONITOR	GPD	NA NA	223540	470420	398263	**	
VINYI CHI OBIDE	10 4	5 =	<u> </u>	333200 RDI	342011 BDI	4/230/4		
1,1-DICHLOROETHANE	2	ה מ מ	: ;:	BDL	- - - - - - - - - - - - - - - - - - -	2 2		_
1,2(TRANS)-DICHLOROETHYLENE	2	, b	7	BDL	BDL	BDL		
1,2(CIS)-DICHLOROETHYLENE	2		1.0	BDL	BDL	BDL		
1,1,1-TRICHLOROETHANE	2		1.4	BDL	BDL	BDL		-
TRICHLOROETHYLENE	9	l⁄g μ	1.7	BDL	BDL	BDL		
BENZENE	0.7	l∕g ⊔	0.7	BDL	BDL	BDL		
TETRACHLOROETHYLENE	5	l∕g μ	1.2	BDL	BDL	BDL		
TOLUENE	2	l∕g ⊔	1.2	BDL	BDL	BDL		
m,p-XYLENE	2	l/g 4	2.4	BDL	BDL	BDL		
o-XYLENE	2	l/g n	1.3	BDL	BDL	BDL		
1,1-DICHLOROETHENE	2		1.2	BDL	BDL	BDL		
METHYL ETHYL KEYTONE	20		10.0	BDL	BDL	BDL		
ACETONE	20		10.0	BDL	BDL	BDL		
CHLOROFORM	7		1.1	BDL	BDL	BDL	_	
DICHLOROBROMOMETHANE	20		6.0	BDL	BDL	BDL		
DIBROMOCHLOROMETHANE	20		0.7	BDL	BDL	BDL		
NAPHTHALENE	9		1.7	BDL	BDL	BDL		
PHENANTHRENE	20		1.0	BDL	BDL	BDL		
FLUORENE	20	/6 н	1.0	BDL	BDL	BDL		
PYRENE	20		1.0	BDL	BDL	BDL		
BIS(2-ETHLHEXYL)PHTHALATE	4.3		1.0	BDL	BDL	BDL		
DI-N-OCTYL PHTHALATE	20	l/g 4	1.0	BDL	BDL	BDL	_	
DIMETHYL PHTHALATE	20	l/g 4	1.0	BDL	BDL	BDL		
DIETHYL PHTHALATE	20		1.0	BDL	BDL	BDL		
IRON, TOTAL	009		2.0	52.0	50.0	73.0		
MANGANESE, TOTAL	009		1.0	295.0	134.0	150.0		
SUM IRON & MANGANESE	1000		AN	347.0	184.0	223.0		
NICKEL, TOTAL	2000		5.0	BDL	3.0	3.0		
ARSENIC, TOTAL	20		48.0	BDL	BDL	BDI		
ALUMINUM, TOTAL	2000		40.0	BDL	BDL	BDL	_	_
CHROMIUM, TOTAL	20		2.0	5.0	BDL	BDL		
CANA TIME TO COMMENTE OF THE COMMENT	# H. C. C. C. L. C.	1,100	:		= !!!!	-	=	=

^{**}NOTE: PLANT WAS SECURED 5 DAYS DUE TO LIGHTNING STRIKE AT RECHARGE BASIN WHICH DESTROYED INSTRUMENTATION THAT MONITORED WATER LEVELS IN RECHARGE BASIN

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK 5	0.00 0.00 0.00	
WEEK4 03/28/00	8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL	BDL
WEEK3 03/21/00	8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL	BDL
WEEK 2 03/14/00	80L 80L 80L 80L 80L 80L 80L 80L 80L 80L	BDL BDL
WEEK 1 03/07/00	80L 80L 80L 80L 80L 80L 80L 80L 80L 80L	BDL BDL
COMP'T MDL	AN 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	40.0
UNITS		/6 n
DISCHARGE LIMITATIONS	MONITOR MONITOR 5 5 0.7 5 5 5 5 5 5 6 60 600 1000 2000	2000
EFFLUENT PARAMETER	FLOW, DAILY MAX VINYL CHLORIDE 1,1-DICHLOROETHANE 1,2(TRANS)-DICHLOROETHYLENE 1,2(CIS)-DICHLOROETHYLENE 1,1,1-TRICHLOROETHYLENE 1,1,1-TRICHLOROETHYLENE EBENZENE TETRACHLOROETHYLENE BENZENE TOLUENE M.pXYLENE O-XYLENE CHLOROETHYLENE METHYL ETHYL KEYTONE ACETONE CHLOROBROMOMETHANE DICHLOROBROMOMETHANE NAPHTHALATE DICHLOROBROMOMETHANE NAPHTHALATE DICHLOROBROMOMETHANE DICHLOROBROMOMETHANE NAPHTHALATE DICHLOROBROMOMETHANE NAPHTHALATE DICHLOROBROMOMETHANE DICHLOROBROMOMETHANE NAPHTHALATE DICHLOROBROMOMETHANE N	ALUMINUM, TOTAL CHROMIUM, TOTAL

NOTE: AVERAGE AND MAXIMUM DAILY FLOWS UNAVAILABLE DUE TO PROBLEMS WITH INSTRUMENTATION PACKAGE

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

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WEEK 5 02/29/00	542160	BDL	BDL	BDL	BDL	BDL	BDL	BD I	BD 1	BDL	BDL	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	44.0	62.0	106.0	0.9	BDL	BDL BDL
WEEK4 02/22/00	402840	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	62.0	62.0	124.0	2.0	BDL	BDL BDL
WEEK3 02/15/00	510720 564480	BDL	BDL	BDL	BDL	BDL	BDL	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	298.0	375.0	673.0	0.6	BDL	BDL BDL
WEEK 2 02/08/00	536760 560160	BDL	BDL	BDL	BDL	BDL	BDL		8DF	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	85.0	257.0	342.0	2.0	BDL	BDL BDL
WEEK 1 02/01/00	522720	BDL	BDL	BDL	BDL	BDL	BDL	2 2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.09	0.79	127.0	17.0	BDL	8DL 2.0
COMP'T MDL	A X	1.1	1.1	1.1	1.0	4.	1.7	1.7	1 <u>1</u>	2.4	1.3	1.2	10.0	10.0	1.1	6.0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	Ϋ́	2.0	48.0	40.0 2.0
SLINO	GPD GPD	η g/l		l/g n	l/g ц	l/g ц]/b n) 5 1. 1) 6 1				/b n		l/g n					l/g μ	m g/l	/b п	/β π				l/g ц			/6 п /6 п
DISCHARGE LIMITATIONS	MONITOR	2	2	വ	2	ر د ما	10	. · ·	വ	2	2	2	20	20	7	20	20	10	20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-TRICHLOROETHANE	KICHLOKOE HYLENE BENZENE	TETRACHLOROFTHY! ENF	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, IOIAL	ARSENIC, TOTAL	ALUMINUM, IOTAL CHROMIUM, TOTAL

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK4 01/25/00		BDL	BDL	BDL	BDL BDI		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	57.0	72.0	129.0	10.0	BDL	BDL	0.6	: הוקר
WEEK3 01/18/00		BDL	BDL	BDL	EDL By	ק ק	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	179.0	102.0	281.0	2.0	BDL	BDL	BDL	A HAVA TON A
WEEK 2 01/11/00		BDL	BDL	BDL	BDL BDI	7 2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1310.0	373.0	1683.0	14.0	BDL	BDL	3.0	TIVES FLOW
WEEK 1 01/05/00		BDL	BDL	80F	80F	2 6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2280.0	402.0	2682.0	10.0	BDL	BDL	BDL	ON ALTERNA
COMP'T MDL	NA AN	1.1	1.1	- 0	5. 4	1.1	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0	1.1	6.0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	Ϋ́	5.0	48.0	40.0	2.0	SPRECIPITAT
UNITS	GPD GPD	l/g ₁/]/в п	/β π	љ, т. .	- - - - -	/b 1	/б n	l/g n	/6 n	l/g n	l/g n	/в н	l/g n	l/g η	/6 n	l/в и	l/g μ	/6 n	/6 п	l/g n	m g/l	/6 п	l∕g n	l/в ц	l∕g μ	l/g μ	/в н	η g/l	l∕g μ	/β π	l/в и	OF METAL
DISCHARGE LIMITATIONS	MONITOR	2	ເນ	ı, cı	n w	, C	0.7	2	2	ည	വ	5	20	20	7	20	20	10	20	50	20	4.3	20	20	20	009	009	1000	2000	20	2000	50	DUIT TO TESTING
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROE HYLENE	1,4(OIS)-DICHLOROETHTEINE	TRICHLOROETHYLENE	BENZENE	TETRACHLOROETHYLENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, TOTAL	CHROMIUM, TOTAL	NOTE: METALS LIMITATIONS EXCEEDED DUE TO TESTING

NOTE: METALS LIMITATIONS EXCEEDED DUE TO TESTING OF METALS PRECIPITATION ALTERNATIVES. FLOWS NOT AVAILABLE DUE

TO COMPUTER WORK STATION MALFUNCTION.

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK4 12/28/99	480719 743507 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL
WEEK3 12/22/99	158374 163341 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL 8DL
WEEK 2	
WEEK 1	
COMP'T MDL	GPD GPD GPD The gold
UNITS	OPD
DISCHARGE LIMITATIONS	
EFFLUENT PARAMETER	FLOW, DAILY AVG FLOW, DAILY MAX VINYL CHLORIDE 1,1-DICHLOROETHANE 1,2(IS)-DICHLOROETHYLENE 1,2(IS)-DICHLOROETHYLENE 1,2(IS)-DICHLOROETHYLENE 1,1,1-TRICHLOROETHYLENE 1,1,1-TRICHLOROETHYLENE 1,1,1-TRICHLOROETHYLENE 1,1-DICHLOROETHYLENE 1,1-DICHLOROETHENE 1,1-DIC

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK4 WEEK 5 11/23/99 11/30/99		BOL		80L 80L	מטר פטר		BOL								_										BB	0 77.0 515.0	65.0	71	7.0	BDL	BDL BDL
WEEK3 11/16/99	251149	BDL	BDL	뮵	מקק הם	<u> </u>	80 F	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	185.0	32.0	217.0	BDL	BDL	356.0 BDL
WEEK 2 11/09/99	329342	BDL	BDL	80F	של ה מ		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		0.06	029	155.0	14.0	BDL	BDL BDL
WEEK 1 11/03/99	341680	BDL	BDL	80F	בים		80F	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	237.0	0.74	284.0	8.0	BDL	BDL 2.0
COMP'T MDL	A A	7	7	+- ¢) - -	4. L	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0	÷	6.0	0.7	1.7	1.0	1.0	1.0	0.	0.1	1.0	1.0	2.0	1.0	Ϋ́	5.0	48.0	40.0
UNITS	GPD GPD) b n	/6 n	Б° п.:	5 6 n :	5 5 = =	, <u>,</u>	/6 n	l/g 1	l/g u	l/g n	l/g n/	lg H	l/g n	l/g u	l/g u	l/g u	l/g n	lg H	η m	⁄σπ	E 6	/b n	l/g u	/b n	lg u	log ii	l/g n	l/g n	/b n	5 b
DISCHARGE LIMITATIONS	MONITOR	2	ស	ري د د	ត ប	o 5	0.7	S	22	2	2	2	20	20	7	20	20	9	20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000
EFFLUENT PARAMETER	FLOW, DAILY AVG	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	TRICHLOROFTHY FOR	BENZENE	TETRACHLOROETHYLENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, TOTAL CHBOMIUM TOTAI

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

PARAMETER	LIMITATIONS		MDL	10/06/99	WEEK 2 10/12/99	WEEK3 10/19/99	WEEK4 10/26/99
	MONITOR	GPD CPD	A Z	* *	* *	* *	477411
	2	2 _ Z	-	BDI	200	ב	932 199 RDI
1,1-DICHLOROETHANE	2	, D	-	BDL	BDL	B 25	מה הם
1,2(TRANS)-DICHLOROETHYLENE	2	, б т	7	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHYLENE	2	l/g n	1.0	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	2	η g/l	1.4	BDL	BDL	BDL	BDL
TRICHLOROETHYLENE	10	l/6 n	1.7	BDL	BDL	BDL	BDL
	0.7	l/g μ	0.7	BDL	BDL	BDL	BDL
TETRACHLOROETHYLENE	2	η g/l	1.2	BDL	BDL	BDL	BDL
	2	η g/l	1.2	BDL	BDL	BDL	BDL
	2	/в п	2.4	BDL	BDL	BDL	BDL
	2	η g/l	1.3	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	2	η g/l	1.2	BDL	BDL	BDL	BDL
METHYL ETHYL KEYTONE	20	l/g n	10.0	BDL	BDL	BDL	BDL
	20	μ g/l	10.0	BDL	BDL	BDL	BDL
	7	η g/l	1.1	BDL	BDL	BDL	BDL
DICHLOROBROMOMETHANE	20	l/g n	6.0	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	20	l∕g ⊔	0.7	BDL	BDL	BDL	BDL
	10	l/g μ	1.7	BDL	BDL	BDL	BDL
	20	η g/l	1.0	BDL	BDL	BDL	BDL
	20	ľв п	1.0	BDL	BDL	BDL	BDL
	20	l/g μ	1.0	BDL	BDL	BDL	BDL
BIS(2-ETHLHEXYL)PHTHALATE	4.3	m g/l	1.0	BDL	BDL	BDL	BDL
DI-N-OCTYL PHTHALATE	20	η g/l	1.0	BDL	BDL	BDL	BDL
DIMETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDL
DIETHYL PHTHALATE	20	l/g n	1.0	BDL	BDL	BDL	BDI
	009	η g/l	2.0	36.0	** 1140.0	44.0	406.0
MANGANESE, TOTAL	009	η g/l	1.0	376.0	306.0	306.0	125.0
SUM IRON & MANGANESE	1000	η g/l	Ϋ́Z	412.0	1446.0	350.0	531.0
	2000	l/g 1	5.0	BDL	7.0	BDL	BDL
	20	h g/I	48.0	BDL	BDL	BDL	BDL
ALUMINUM, TOTAL	2000	l/β π	40.0	53.0	26.0	BDL	42.0
CHROMIUM TOTAL	05	70 ::	c	2	č		

Data lost due to computer hard drive failure.
 Process normal. Results may have been effected by sampling error.

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK4 09/28/99	509100	528219	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	39.0	367.0	406.0	8.0	BDL	BDL	BDL
WEEK3 09/21/99	144114	526302	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	204.0	471.0	675.0	0.6	BDL	BDL	BDL
WEEK 2 09/14/99	421521	541807	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	159.0	569.0	728.0	8.0	BDL	BDL	2.0
WEEK 1 09/07/99	534145	535443	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	* 1080.0	* 1050.0	2130.0	0.9	BDL	BDL	BDL
COMP'T MDL	Y S	A A	- .	1.1	-	1.0	4.	1.7	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0	1.	6.0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	ΑN	5.0	48.0	40.0	2.0
UNITS	GPD	GPD	/6 л	l/g μ	l/g n	l/g н	/6 н	l∕g ⊔	l/g n	l/g n	/в _п	l/g n	l∕g ⊔	l/g n	l/g n	l/b n	/6 n	l/g u	/6 n	l∕g μ	l/g n	/в н	l/g n	m g/l	l/g n	l/g η	l/g n	l/g n	l/g n	l/g u	l/g u	l/g n	/в п	l/β π
DISCHARGE LIMITATIONS	MONITOR	MONITOR	သ	2	2	2	သ	10	0.7	2	2	2	2	2	20	20	7	20	20	10	20	20	20	4.3	20	20	20	009	009	1000	2000	20	2000	20
EFFLUENT PARAMETER	FLOW, DAILY AVG	FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(1KANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHYLENE	BENZENE	TETRACHLOROETHYLENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, TOTAL	CHROMIUM, TOTAL

Cause under investigation. Modifications to process will be *Discharge limitations exceeded. made if necessary.

NASSAU COUNTY FIREMAN'S TRAINING CENTER GROUNDWATER REMEDIATION FACILITY MONTHLY EFFLUENT MONITORING REPORT OUTFALL 001

WEEK 5	09/01/99	144192	454648	BDL	BDL	BDL	BDL	BDL	BDL	BDI	BDL	BDL	BDL	BDL	BDL	BDI	BDI	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.4	BDL	BDL	205.0	* 666.0	871.0	8.0	BDL	BDL BDL
WEEK4	08/23/99	246001.0	281554.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	29.0	200.0	259.0	BDL	BDL	BDL BDL
WEEK3	08/11/99	293414.0	335813.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	86.0	296.0	682.0	BDL	BDL	BDL
WEEK 2	08/09/99	326372.0	338133.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	35.7	BDL	BDL	BDL	BDL	BDL	BDL	4.2	150.0	497.0	647.0	12.0	BDL	BDL 2.0
WEEK 1	08/02/99	295156.0	297052.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	116.0	443.0	229.0	11.0	BDL	BDL 3.0
COMP'T	MDL	ΑΝ	Ϋ́	7:	7:	1.	1.0	1.4	1.7	0.7	1.2	1.2	2.4	1.3	1.2	10.0	10.0	1.1	6.0	0.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	Ϋ́	2.0	48.0	40.0 2.0
UNITS		GPD	GPD	/b п	l/g μ	μ g/l	l/g μ	μ β	l/g n	, б п	l/g n	/в п	l/g 11	l/g η	l/g η	l/g n	l/g n	/b n	/6 1	η'b η	l/g η	l/в и	l/g η	l/g μ	m g/l	/b н	/b п	l/g η	l/g μ	/β π	µ д/I	l/в ц	/б п	/6 n
DISCHARGE	LIMITATIONS	MONITOR	MONITOR	5	2	5	2	2	10	0.7	5	2	2	2	2	20	20	7	20	20	10	20	20	20	4.3	20	20	20	009	009	1000	2000	50	2000
EFFLUENT	PAKAME EK	FLOW, DAILY AVG	FLOW, DAILY MAX	VINYL CHLORIDE	1,1-DICHLOROETHANE	1,2(TRANS)-DICHLOROETHYLENE	1,2(CIS)-DICHLOROETHYLENE	1,1,1-TRICHLOROETHANE	TRICHLOROETHYLENE	BENZENE	TETRACHLOROETHYLENE	TOLUENE	m,p-XYLENE	o-XYLENE	1,1-DICHLOROETHENE	METHYL ETHYL KEYTONE	ACETONE	CHLOROFORM	DICHLOROBROMOMETHANE	DIBROMOCHLOROMETHANE	NAPHTHALENE	PHENANTHRENE	FLUORENE	PYRENE	BIS(2-ETHLHEXYL)PHTHALATE	DI-N-OCTYL PHTHALATE	DIMETHYL PHTHALATE	DIETHYL PHTHALATE	IRON, TOTAL	MANGANESE, TOTAL	SUM IRON & MANGANESE	NICKEL, TOTAL	ARSENIC, TOTAL	ALUMINUM, TOTAL CHROMIUM, TOTAL

Modifications to process will be Cause under investigation. *Discharge limitations exceeded. made if necessary.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Division of Environmental Remediation

Inactive Hazardous Waste Site Operations and Maintenance Review Report

					Form Date 96.10.01
Site Name: Nassau Count	ty Fire Trainin	g Center	Class: 2	2	Number: 1-30-042
O&M Funding Source:	☐ State Sup	perfund	deral Superfund	K Municipal	☐ Responsible Party
O&M Information: O&M	Start: 03/99	End:		Annual Cost:	\$ 🗆 Estimated
Interim Remedial Measur	es/Operable U	nits in O&M Phas	e:		
☐ Drum Removal		☐ Soil Removal		☐ Tank R	emoval
☐ Cap/Cover		□ Containment S		☐ Fence/S	•
✗ Groundwater Recover	•		ction/Treatment	•	Extraction/Treatment
☐ Air Sparging/Stripper	System	☐ Treatment/Filtr	ation Plant/System	□ Potable	Water Supply/System
Other:	Dood Postric	tion D	scharge Permit	□ Dena	rtment of Health Sampling
Other:	_ Deed Result		scharge Ferrint	□ Бера	Turrent of Fleatur Sampling
O&M Review Information	 :				_
Reports: Monthly Reports	from Peter Wit	kowski, Director of	Hazardous Waste Se	ervices of Na	ssau County DPW
Inspection:					
Sampling:					
Conclusions:					
	s □ No: Th	o process officions	is evenlent on VOC	s but the flo	w rate is restricted until
Remedy Effective? X Ye the recharge basin or an					v_rate is restricted until
ROD Compliance?					
Consent Order Compliance	? 🗆 Yes	□ No:			
Other:					
has been the ability to recharequires the operators to the promising for the siting of a solution is the use of the efficiency claims to be able to arrangement.	variety of VOC ally well within arge processed rottle back the mother recharg fluent from this use the entire	cs. An occasional had effluent discharge of water. The sole replant to the recharge e basin, soil character plant to irrigate the plant flow during so	high iron or manganest criteria limits. The on echarge basin is the content of th	se concentra ily problem the ritical path to ploratory bor ciently perme ge State Par nat would be	tion is reported, however, hat is evident with this facility o plant operation, and lings have not been eable. However, a promising ork golf course. The Golf a mutually beneficial
ROD/Consent Order Modifi	cations?	No 🗌 Yes (per abo	ve) Reclassify the S	Site? 🗶 No	☐ Yes → Class:
Comments: This plant has a 2.6 MGD f MGD. This flow rate is exp limitations is found. The tre Nassau County can be mad NEXT ANNUAL REVIEW: 0	ected to "hold" eatment proces de, a substantia	the contaminate places appears to work	ume until a solution to well, and if an arrange	the current ement betwe	recharge basin hydraulic en the Golf Course and
Project Manager:		_	Reviewer:	, 1	./ /
Care North	<u> </u>	March 23, 2001	Monias	1 Lean	ion 3/26/01
Signature Carl Hoffman DER / B	BHSC / WIS	Date (518) 457-9538	Signature Thomas Reamon P	E DER /BI	*Date / HSC/ WIS (518) 457-9538
	or Bureau	Telephone	Name	Region or Bur	

New York State Department of Environmental Conservation

Division of Environmental Remediation Bureau of Hazardous Site Control, Room 252

50 Wolf Road, Albany, New York 12233-7010

Phone: (518) 457-8807 • FAX: (518) 457-8989

Website: www.dec.state.ny.us

January 22, 2001



Mr. Peter J. Witkowski Director of Hazardous Waste Services Nassau County Department of Public Works Mineola, New York 11501-4822

FILE COPY

Dear Mr. Witkowski:

Re: Nassau County Fireman's Training Center Site Code 130042

This letter is in response to your most recent effluent monitoring report of the Fireman's Training Center treatment plant which indicates that all monitored parameters were below effluent discharge limitations. Clearly, the treatment process is working well.

The only concern regarding the treatment plant's optimum operation is increasing effluent disposal capacity. With your one recharge basin limiting the amount of water that can be processed by the treatment plant, and your exploratory borings not showing favorable geotechnical conditions for the construction of an additional recharge basin, this presents a significant problem to the overall treatment plant operation and consequently, the site's overall remediation.

Your proposal of transporting treated effluent by pipeline to the adjacent Old Bethpage State Park golf course for irrigation is an excellent solution to both disposing of your effluent while reusing a valuable resource of top quality. With the US Open to be hosted in the near future, the golf course will likely need large quantities of water to keep the course in top condition. The operation and maintenance of just a pipeline will also likely be a preferred alternative to that of additional recharge basin.

For your information, the Port Washington Landfill is also an inactive hazardous waste site (Site Code #130025) in the Town of North Hempstead and is currently reusing treatment plant effluent to irrigate their adjacent golf course. You may wish to review operational and design aspects of their system and take a tour of treatment plant operations if you have not done so already. Commissioner Matthew J. Miner of the Town of North Hempstead Department of Public Works submits operational reports for the Port Washington Landfill and his number is (516) 767-4610.

If I can be of help to you in implementing this project, feel free to contact me at (518) 457-9538 for assistance.

Sincerely,

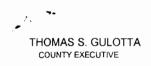
Carl Hoffman, P.E.

Environmental Engineer 2

Bureau of Hazardous Site Control

Division of Environmental Remediation

bcc: T. Reamon G. Rider





COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

May 25, 2000

New York State Office of Parks Recreation and Historic Preservation Long Island Region - Belmont Lake State Park P.O. Box 247 Babylon, New York 11702-0247

Attn: Ms. Margaret P. Reilly Regional Director

Re: Water Reuse from Fireman's Training Center Groundwater Remediation Facility for Bethpage State Park

Dear Ms. Reilly:

This is in response to your May 10, 2000 letter, wherein you expressed the support of the New York State Office of Parks, Recreation and Historic Preservation concerning the reuse of treated groundwater from the Fireman's Training Center Groundwater Remediation Facility (FTC) by Bethpage State Park (BSP) for its irrigation needs. The County is very pleased that the State Parks supports and is anxious to proceed with this water reuse alternative, because it certainly represents a benefit to both parties and the environment.

Since our last meeting on May 3rd with your technical staff, the Water Resources Unit (WRU) of this Department has discussed the reuse plan with the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC fully supports the plan, and is willing to make the costs of the project eligible for New York State Environmental Quality Bond Act (EQBA) funding. Our WRU is completing a preliminary layout and cost estimate for the transmission system between the FTC and BSP, which they will discuss with your Regional Engineer, Mr. Neil Rosenberg. After both parties agree upon the layout and preliminary cost estimate, the package will then be submitted by this Department to the NYSDEC for EQBA grant approval. In addition, this Department will investigate any requirements that the New York State Department of Health might have for such a water reuse application.

NYS Office of Parks Long Island Region - Belmont Lake State Park Water Reuse from Fireman's Training Center Page Two May 25, 2000

Again, I would like to express the support of the County for the proposed water reuse plan, and I look forward to a mutually beneficial relationship. If there are any questions concerning this matter, please contact Mr. Peter J. Witkowski, Director of Hazardous Waste Services at (516) 571-6970.

Very truly yours,

John M. Waltz, P.E.

Commissioner of Public Works

JMW:PJW

c: John J. Pascucci, Acting Division Head of Sanitation and Water Supply Neil A. Rosenberg, New York State Parks, Belmont Lake State Park David Catalano, New York State Parks, Bethpage State Park Karl Hoffman, NYSDEC - Albany Michael Mason, NYSDEC - Albany

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Division of Environmental Remediation

Inactive Hazardous Waste Site Operations and Maintenance Review Report

				Form Date 96.10.01
Site Name: Nassau County Fire Training		Class: 2		mber: 1-30-042
O&M Funding Source: ☐ State Sup	perfund	eral Superfund X	Municipal	□ Responsible Party
O&M Information: O&M Start: 03/99	End:	Aı	nnual Cost: \$	☐ Estimated
Interim Remedial Measures/Operable U	Inits in O&M Phase) :		
□ Drum Removal	□ Soil Removal		□ Tank Rem	
□ Cap/Cover	☐ Containment S		☐ Fence/Sec	•
★ Groundwater Recovery/Treatment			•	raction/Treatment
☐ Air Sparging/Stripper System☐ Other:	□ reatment/Filtr	ation Plant/System	☐ Potable W	ater Supply/System
Institutional Controls: Deed Restrict	ction	scharge Permit		nent of Health Sampling
Other:		scharge r erriit	L Departin	rent of Fleath Camping
O&M Review Information:				
Reports: Monthly Reports from Peter Wit	tkowski, Director of	Hazardous Waste Ser	vices of Nassa	au County DPW
Inspection:			_	
Sampling: Other: Telephone communications wi	ith Deter Millions	9 diagramian colle \$400	o Mosan	
	ith Peter Witkowski,	& discussion with Mik	e Mason	
Conclusions:	-	is exactlent on VOCs	hut the flour	ata in rootriotad until
Remedy Effective?				
ROD Compliance?				
	-	_		
Consent Order Compliance? ☐ Yes	□ No:			
Other:			_	
Recommendations: This facility has been regularly submitting discharge criteria renewal covering the per only parameters which have exceeded efflip parameters had exceeded the discharge concentration of iron and manganese in the facility is operating at a reduced flow rate. Services is expected. Until this issue is re	riod of July 1, 1999 luent criteria, and th criteria. This site is r ne vicinity. While all due to the inability t	through July 1, 2004. e latest report submitto near the Old Bethpage VOC effluent parame o recharge a higher flo	Iron and Man ed December : Landfill, which ters are below www. Additional	ganese have been the 21, 1999 indicated that no h is likely influencing the detection limits, the
ROD/Consent Order Modifications?	No □ Yes (per abo	ve) Reclassify the Si	te? 🗶 No	☐ Yes → Class:
Comments: It is possible the high concentrations of iro Mason indicates he has spoken to Peter V problem of this 2.6 MGD plant. Additional to work well, however, the hydraulics of th PETER IS WAL AWARE of Pivex PE WILL WALL AT THIS SITE A NEXT ANNUAL REVIEW: 01/2001	Vitkowski who says I construction fundir	that further work is exig may be available as	pected to be rewell. The tre	needed to solve the atment process appears
Signature //	January 21, 2000 Date	Reviewer: Juan Signature	ldfoled	Jan 25, 2000
Carl Hoffman DER / BHSC / WIS Name Region or Bureau	(518) 457-9538 Telephone	Name	Region br Bureau	BHSC 457 (1927) Telephone

New York State Department of Environmental Conservation Division of Environmental Remediation

Bureau of Hazardous Site Control, Room 252 50 Wolf Road, Albany, New York 12233-7010 Phone: (518) 457-8807 FAX: (518) 457-8989



July 26, 1999

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Peter Witkowski, Director Hazardous Waste Services Unit County of Nassau Dept. Of Public Works Mineola, NY 11501-4822

Dear Mr. Witkowski:

RE: Nassau Co. Fire Training Site #130042

Operation and Maintenance Year 2000 Assessment

This letter requests that you perform a Year 2000 (Y2K) systems control assessment on all environmental treatment systems at the above site to determine whether failure of date sensitive environmental treatment systems will create a potentially imminent or substantial endangerment to human health or the environment. This assessment must include default scenarios resulting from failure of power or communications sources external to the treatment systems themselves. Your analysis should include the consequences of simultaneous or sequential multiple failures.

The term "Y2K failure" is the past programming practice of truncating date and/or time to save memory. Two known common examples are the use of 9999 for September 9, 1999, and 123199 for December 31, 1999. The concern is the uncertainty whether those dates will rollover and be recognized, respectively, as 9/10/1999 and 01/01/2000. Areas of risk can be from computer operated systems and devices which contain embedded chips. In some instances, a single system or an isolated processor chip could be responsible for critical equipment malfunction or failure.

Leachate collection and pump and treat systems designed for periodic pump outs of collected liquids are the most common environmental treatment systems vulnerable to Y2K failures. Specific equipment found to be non-compliant in Y2K assessments include controllers, server software, instrumental software, monitoring system software, and, most frequently, the system computer itself. In addition, consideration should be given to what action will take place in the event of a power grid failure, e.g., freezing of pipes.

Please complete the Y2K assessment for the above site by September 30, 1999. Please include a written summary of your assessment in your next quarterly report. The summary shall include your conclusions to include, if applicable, "no problems identified" or, if problems were identified, repair measures, including a schedule, and contingency plans.

Should you have any questions, please call Carl Hoffman, P.E. at (518) 457-9538.

Sincerely.

Gerald J. Rider, Jr.

Chief

Operation & Maintenance Section Bureau of Hazardous Site Control

Division of Environmental Remediation

bcc: RHWRE - Sue McCormick

C. Hoffman

 $c: wpdocs \\ \ ssfpmY2K.wpd$

New York State Department of Environmental Conservation Division of Environmental Remediation

Bureau of Hazardous Site Control, Room 252

50 Wolf Road, Albany, New York 12233-7010 Phone: (518) 457-9538 FAX: (518)457-8989



July 14, 1999

Mr. Peter Witkowski, Director Hazardous Waste Services Unit County of Nassau Department of Public Works Mineola, NY 11501-4822

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center, Site #1-30-042

The effluent discharge criteria, and monitoring requirements for the groundwater pump and treatment facility at the above referenced site has been renewed for the period July 1, 1999 through July 1, 2004 and is enclosed.

The Division of Environmental Remediation is responsible for ensuring compliance of this discharge as it is related to the remediation of an inactive hazardous waste site. To facilitate that responsibility, please send a copy of your effluent discharge monitoring report to Mr. Gerald Rider P.E. Chief, Operations and Maintenance Section, at the above address. Also, it is requested that an informational copy of your effluent discharge monitoring report be provided to Mr. Robert Schneck P.E., Regional Water Engineer, NYSDEC Region 1, SUNY Campus, Building 40, Stony Brook NY 11790.

If you have any questions, feel free to contact me at any time at (518) 457-9538.

Sincerely,

Carl Hoffman P. E.

Care Hoffman

Environmental Engineer 2

Western Investigation Section

Bureau of Hazardous Site Control

Division of Environmental Remediation

Attachment

bcc: M. Mason

T. Reamon

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York, 12233-3505



MEMORANDUM

TO: Carl Hoffman, Western Investigation Section, BHSC/DER

FROM: Sudhir Mahatma, CSS, BWP/DOW SM

SUBJECT: Nassau County Fire Training Center, Site # 1-30-042

DRAINAGE BASIN:

DATE: July 8, 1999

In response to your request dated May 18,1999 to Angus Eaton, attached please find effluent criteria for the above noted groundwater remediation discharge.

The DOW does not have any regulatory authority over a discharge from a State, PRP, or Federal Superfund Site. DER will be responsible for ensuring compliance with the attached effluent criteria and approval of all engineering submissions. Footnote 1 identifies the Bureau of Site Control as the place to send all effluent results, engineering submissions and modification requests. The Regional Water Engineer should be kept appraised of the status of this discharge and, in accordance with the attached criteria, receive a copy of the effluent results for informational purposes.

If you have any questions, please call me at 7-9602.

Attachments (Effluent Criteria, General Conditions)

cc: Robert Schneck, Regional Water Engineer, R-1 (w/Effluent Criteria)

A. Eaton, DOW (w/Effluent Criteria)

A. Mirza, DOW (w/Effluent Criteria)



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New York State Department of Environmental Conservation

Division of Environmental Remediation

Bureau of Hazardous Site Control, Room 252 50 Wolf Road, Albany, New York 12233-7010 Phone: (518) 457-9538 FAX: (518)457-8989





TO: Angus Eaton, Chief, Chemical Systems Section, BWP/DOW

FROM: Carl Hoffman, Western Investigation Section, BHSC/DER

SUBJECT: Nassau County Fire Training Center (#130042), Permit Equivalent Renewal

DATE: May 18, 1999

The attached Inactive Hazardous Waste Site Permit Equivalent, for the above referenced site, will expire on July 1, 1999. Peter Witkowski of Nassau County, telephoned me on May 17, 1999 to inquire about the permit equivalent renewal and whether he should expect any changes to be made to the existing sampling frequencies and discharge limitations currently in effect.

As the existing permit effluent discharge criteria was established five years ago, the treatment plant operators are anxious to learn if new requirements and/or changes will be implemented. The treatment plant is currently being sampled on a daily basis for operational control. Once the operation becomes routine, the sampling frequently may default to the minimum weekly sampling as required in the permit equivalent.

Subsequently, as their sampling frequency may be based upon the permit equivalent minimum requirements, they are interested to know if any changes will be made.

I told Peter that I would contact the Division of Water regarding their permit equivalent renewal, and forward the effluent discharge criteria to him. If you require additional information, or if I can be of further assistance to facilitate this renewal, please contact me at 7-9538, or by e-mail.

Fax

To: Peter Witkowski

Of: Nassau County

Fax: 516 571 6858

Phone: 516 571 6850

Pages: 2, including this cover sheet.

Date: August 25, 1998

Peter:

I did get a copy of the discharge limitations from the Division of Water for the Nassau County Fire Training Site's 1500 gpm discharge to a groundwater recharge basin.

You are correct, as there is a Title 3 Consent Order, a SPDES Permit is not required, however the substantive requirements of a SPDES discharge are to be met. My Division, the Division of Environmental Remediation is responsible for ensuring compliance with the effluent criteria. However, the Division of Water requests that the NYSDEC Region 1 Regional Water Engineer be kept apprized of the status of the discharge and sent a copy of effluent monitoring results for informational purposes. The Region 1 Regional Water Engineer is Robert Schneck P.E. in Stony Brook.

The current effluent limitations and monitoring requirements cover the period July 1, 1994 through July 1, 1999.

Let me know if know if you have any questions or if I can be of further assistance.

Carl

From the desk of...

DHWH No.: 1-30-042

Part 1, Page 1 of 1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning	July 1, 1994	
and lasting until	July 1, 1999	

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

					nimum Requirements
Outfall Number & Effluent Parameter	Discharge Daily Avg.	e Limitations Daily Max.	Units	Measurement Frequency	Sample Type
Outfall 001 - Treated Groundwater:					
Flow	Monitor	Monitor	gpd	Continuous	Meter
Vinyl Chloride	NA	5	μg/l	Weekly	Grab
1,1-Dichloroethane	NA	5	μg/l	Weekly	Grab
1,2-(trans)-Dichloroethylene	NA	5	μg/l	Weekly	Grab
1,2-(cis)-Dichloroethylene	NA	5	μg/l	Weekly	Grab
1,1,1-Trichloroethane	NA	5	μg/l	Weekly	Grab
Trichloroethylene	NA	10	μg/l	Weekly	Grab
Benzene	NA	0.7	μg/l	Weekly	Grab
Tetrachloroethylene	NA	5	μg/l	Weekly	Grab
Toluene	NA	5	μg/l	Weekly	Grab
Xylenes, each isomer	NA	5	μg/l	Weekly	Grab
1,1-Dichloroethene	NA	5	μg/l	Weekly	Grab
Methyl Ethyl Ketone	NA	50	μg/l	Weekly	Grab
Acetone	NA	50	μg/l	Weekly	Grab
Chloroform	NA	7	μg/l	Weekly	Grab
Dichlorobromomethane	NA	50	μg/l	Weekly	Grab
Dibromochloromethane	NA	50	μg/l	Weekly	Grab
Naphthalene	NA	10	μg/l	Weekly	Grab
Phenanthrene	NA	50	μg/l	Weekly	Grab
Fluorene	NA	50	μg/l	Weekly	Grab *
Pyrene	NA	50	μg/l	Weekly	Grab
Bis(2-ethylhexyl)phthalate	NA	4.3	mg/l	Weekly	Grab
Di-n-octyl phthalate	NA	50	μg/l	Weekly	Grab ्
Dimethyl phthalate	NA	50	μg/l	Weekly	Grab
Diethyl phthalate	NA	50	μg/i	Weekly	Grab
Iron, Total	NA	600	μg/l	Weekly	Grab
Manganese, Total	NA	600	μg/l	Weekly	Grab
Nickel, Total	NA	2000	μg/l	Weekly	Grab
Arsenic, Total	NA	50	μg/l	Weekly	Grab
Aluminum, Total	NA	2000	μg/l	Weekly	Grab
Chromium, Total	NA	50	μg/l	Weekly	Grab

Note 1: The Sum of Iron, Total and Manganese, Total shall not exceed 1.0 mg/l.

Note 2: The minimum measurement frequency for all the parameters (except flow) shall be monthly following a period of twenty four(24) consecutive sampling events showing no exceedances of the stated discharge limitations. If a discharge limitation for any parameter is exceeded the measurement frequency for all parameters shall again be weekly, until a period of eight (8) consecutive sampling events shows no exceedances at which point monthly monitoring may resume.

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233 - 3505



MEMORANDUM

TO: George Heitzman, Municipal Projects Section, BCRA, DHWR

FROM: Wither, Chemical Systems Section, BWFD, DOW

SUBJECT: Nassau County Fire Training Center, Nassau County,

Site #1-30-042

DATE: February 24, 1994

In response to your February 15, 1994 memo, effluent criteria and the General Conditions for Consent Orders are attached for a discharge of treated groundwater. The limitations were developed for a 1500 gpm discharge to an off-site recharge basin.

The DOW does not have any regulatory authority over this discharge, since this remedial project is being conducted by DHWR. DHWR will be responsible for ensuring compliance with the attached effluent criteria. The Region 1 Regional Water Engineer should be kept appraised of the status of this discharge and sent a copy of the effluent results for informational purposes.

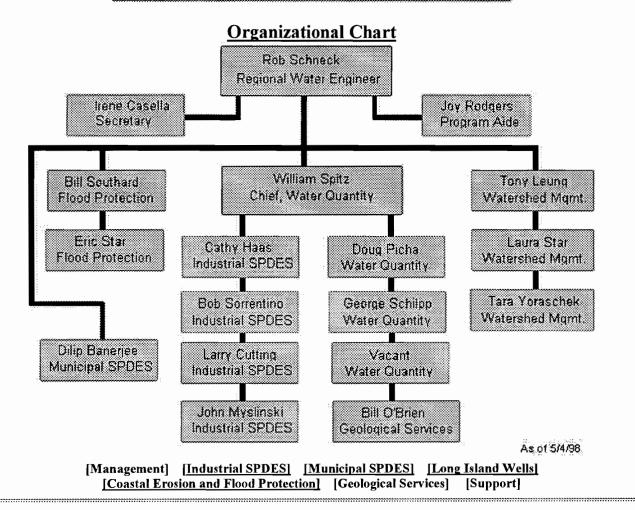
If you have any questions, please call me a 7-6716.

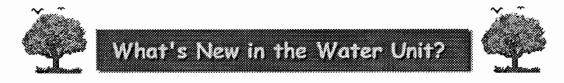
Attachment

cc: R. Schneck, Region 1

S. Hammond, DHWR

NYSDEC - Region 1 Division of Water





PERSONNEL

We've been very busy over the past several months with personnel matters, as evidenced by the following.

- 1) Tony Leung has joined the Water program (from Region 1 Spills), and will be heading up our efforts in the areas of Watershed Management and Bond Act implementation.
- 2) Laura Star has been promoted to Environmental Program Specialist, and will be working with Tony on Watershed Management and Bond Act implementation.

1 of 3 8/25/98 9:39 AM



New York State Department of Environmental Conservation

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MEMORANDUM

TO:

Michael Mason, Eastern Field Services Section

FROM:

Ronnie Lee, Remedial Section C

SUBJECT:

Nassau County Fireman's Training Center, Site #1-30-042

DATE:

March 27, 1998

I have completed my review of the Remediation Monitoring Plan (RMP) for the above-referenced site. Below are my comments:

- 1. Section 1.0, <u>Introduction</u> An O&M Manual will have to be developed for the Groundwater Treatment System (GWTS).
- 2. Section 1.1, <u>Air Discharge Monitoring</u> If the air stripper influent total VOC concentrations are greater than 2 ppm, then air emission treatment should be considered. Off-gas treatment will be required if total VOC air emissions exceed 0.5 lb/day.
- 3. Section 2.4, <u>Air Emissions</u> The maximum allowable influent concentration cited in this section for PCE (4,346 ppb) would result in exceedances of the air discharge limit of 0.5 lb/day. At this concentration air emissions from the air stripper would require treatment (see comment #2 above).
- 4. Section 2.5, <u>Termination Monitoring</u> A low organic level must also be achieved with the zero-slope condition.
- 5. Section 3.2.1, <u>Treatment Facility</u> Departmental approval will be required prior to modifying the treatment facility sampling program.
- 6. Section 3.2.2, <u>Groundwater</u> Graphic well logs for all the wells that comprise the long-term monitoring program should be included in the finalized RMP.
- 7. Section 3.3, Floating Product If significant floating product is consistently observed, consideration should be given to developing a product recovery program for the affected wells to determine the optimal removal method. Product recovery may be accomplished by installing a passive recovery device (adsorbent sock) in the well, or by other means, as appropriate.
- 8. Section 4.6, <u>Reporting</u> This section should be expanded to include a Reporting Requirement Section which defines the reports that will be submitted to the NYSDEC. Progress Reports should be prepared and submitted to the NYSDEC on a monthly basis. The reports should summarize all monitoring and sampling activities performed during the reporting period. At a minimum, the reports should include the following:
 - a) Site Plan.
 - b) Discussion of work activities and any adjustments or modifications made to the remedial system.
 - c) Record of all system downtime.

- d) System operating performance data, including:
 - total pumpage from each extraction well
 - percent up-time for each extraction well
 - total volume of groundwater processed by the GWTS
- e) Potentiometric surface maps, as revised.
- f) Laboratory reports, including chain-of-custody forms and field logs.
- g) Tabulation of groundwater quality data from groundwater monitoring wells and extraction wells.
- h) Air stripper influent concentrations.
- i) Discharge Monitoring Reports.

If you have any questions, you may call me at 7-7924.

cc: G. Rider

R. Becherer, Reg. 1

c:nclf.wp6

New York State Department of Environmental Conservation

Division of Environmental Remediation 50 Wolf Road, Albany, New York 12233-7010



John P. Cahill Commissioner

Disallowance

Mr. John M. Waltz Commissioner of Public Works County of Nassau 1 West Street Mineola, New York 11501

JAN 2 8 1998

Re: Contr

Contract No. C300052

Nassau Co. Fireman's Training

Site No. 1-30-042 Payment No. 15

Dear Commissioner Waltz:

We recently completed our review of Payment No. 15 for the above-referenced contract. Based upon that review, we approved payment in the amount of \$1,048,105.47 rather than the \$1,136,152.00 requested.

Voucher Number

All Vouchers	
No subcontract between CDM and Reprographics was provided	\$37,492.63
Voucher #G06473	
Under Task 50DN, hours billed for C. Walsh (439.5) are excessive. Time sheets must be provided to substantiate this claim.	\$20,522.37
Voucher #G06481 (Envirogen subcontract)	
Period Ending December 31, 1993	
Under Tasks 1.1 and 1.2, invoices for Analytical Testing are not included.	\$ 6,350.00
Period Ending April 1, 1994	
Direct labor summaries are missing from this invoice.	\$13,600.15

Period Ending April 29, 1994

A copy of the bid documentation and subcontract is required for

\$ 9,970.10

the work performed by Tabasco Drilling Corp.

Total Voucher Disallowance Voucher #G06481

\$29,920.25

Voucher #G06492 (Listed as G04692 on Direct Labor Worksheet)

Under task 50DN, the hours billed for W. Lewis (441.5) are excessive Time sheets must be provided to justify this claim.

\$18,543.00

Total disallowed \$106,478.25

Costs claimed on a payment request which are disallowed by the Department may be submitted for reconsideration within 90 days of the date of the disallowance letter or within the next payment period, whichever is longer. Unless resubmitted within this time period, the Department's determination to disallow shall be final and binding on the municipality. The resubmittal of disallowed costs must be accompanied by a request for payment (New York State Standard Voucher). Disallowed costs resubmitted on a payment request by the municipality must address the Department's reasons for disallowance and provide all necessary supporting documentation in order to be reconsidered.

Copies of the amended invoice and Standard Voucher are enclosed for your information.

If you have any questions regarding this matter, please contact Joan Snyder, of my staff, at (518) 485-4803.

Sincerely,

Ralph E. Burger

Principal Accountant

Reph E. Burger

Cost Analysis and Payments Section

Bureau of Program Management

Division of Environmental Remediation

hoo

w/o enc.

R. Cozzy

bcc

w/enc.

G. Heitzman

file

JS/kmd

a:Waltz.#15

MUNICIPALITY'S APPLICATION FOR PAYMENT (TITLE 3 STATE ASSISTANCE CONTRACT)

TO BE COMPLETED BY MUNICIPALITY		FOR AGENCY USE ONLY
PAYEE (Name & Address)	Comptroller Contract No.	Orig. Agency Code
County of Nassau	C300052	.09000
Department of Public Works	Application No. 54 15	Date App. Rec'd 12/8/97
Room 140 1550 Franklin Avenue	Work Period Ending 5/12/95	
Mineola, New York 11501	Payee ID No. 11-6000463	

. 1550 Franklin Avenue	5/12/	7.5	
Mineola, New York 11501	Payee ID No. 11-6000463		
With Final Payments Attach Labor Affidav	its For Payroll Period to Conform	n to New York State Labor L	aw Section 220A
SCHEDULE I	FINANCIAL STATEMENT		
CONTRACT VALUE (Values indica	ate 75% Reimbursement Amounts)	CONTRACT WORK PE	ERFORMED
Line	Line		
1. Original Contract \$ 2,358,00	00 1. Work perform	med in previous application	s s 12,393, 130,07
2. Amendments \$ 15,533,69		med this application	: 1,703,268,92
3. Net Contract Amount s 17,891,69	3. Work perform	ned to date	:13,496,398,99
4. Maximum Retainage \$ 894,58	35 4. Retainage (1	Less Releases)*	s 674,819,95
(5% of line 3) *Line 6 comprised of: *Retainage Releases: Actual Receipts	5. Work perform : \$1.632.246	med to date less retainage	s 12,821,579,04
5% TOTAL Request #6 Rel. No. 1 To be received Rel. No. 3 Ret Retainage	6. Less previou		<u>s 11,773,473.67</u> <u>s 1,048,105,47</u>
SCHEDULE II	CERTIFICATION BY MUNICIPALITY		
I John M. Waltz (Name) the Hunicipality herein referenced. Accapplication payment are correct, all workstatement of the contract account up to a (Date)	c has been performed and/or major nd including the last day of the	(Title) et all items and amounts : rials supplied, the forego riod covered by this ap	shown on the face of this sing is a true and correct plication.
SCHEDULE III	CERTIFICATION BY MYSDEC ENGINEER	R/PROJECT MANAGER DEC Q	8-1907-
I certify that I have checked thi and correct statement of work performed and materials supplied in accordance with the 12/8/97 (Mate)	d/or materials supplied by the co	to the best of my knowleds ntractor, and instructed work waste him	Mas been performed and/or
SCHEDULE IV	ENDORSED BY DEPARTMENT OF ENVIRO	MHENTAL CONSERVATION	,
EXAMINED AND APPROVED BY RESPONSIBLE DIVIS	SION OR BUREAU	APPROVED FOR PAYMENT BY DI	VISION OF FISCAL MANAGEMENT
DATE SIGNATURE	 	DATE SIGN	ATURE

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SIGNATURE

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Il University Place

Albany, New York 12203-3399

Barbara A. DeBuono, M.D., M.P.H. Commissioner

Dennis P. Whalen Executive Deputy Commissioner

September 5, 1997

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County Department of Public Works Mineola, NY 11501-4822

> RE: Nassau County Fire Training Center Site # 130042

SEP 1 2 1997

Bureau of Eastern
Remedial Action

Dear Mr. Witkowski:

I have reviewed your request for approval to proceed with construction of the Confined Space Rescue Training Area (CSRTA) in one of the "Deed Restricted Areas" on the Fire Training Center (FTC) Property. The construction will require several excavations to a depth of less than three feet in areas where soil may be contaminated. Providing that conditions in the New York State Department of Environmental Conservation's approval letter of July 31, 1997 are met, which includes patching the asphalt cap in disturbed areas, the future use of this area for fire training purposes does not present any health concerns.

The Health and Safety plan for protecting FTC personnel and the public during excavation work is adequate for dealing with volatile organic compounds. However, provisions for dust control measures need to be included in the event that site conditions are dry at the time excavations are done. Provided the above conditions are adhered to as part of the construction of the CSRTA, the Department of Health approves the construction of the CSRTA as planned on a portion of a "Deed Restricted Area".

Please call me at 518-458-6305 if you have any questions.

Sincerely,

Steven M. Bates, P.E. Chief, Southern Section

Bureau of Environmental Exposure

Investigation

cc: Dr. N. Kim

Dr. A. Carlson

Mr. G. Heitzman

Mr. B. Smith

k:\steve\724610.ltr

New York State Department of Environmenta 50 Wolf Road, Albany, New York 12233-7010

bcc: S. McCormick/G. Heitzman

B. Becherer M. Mason

July 31, 1997

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County Dept. of Public Works Mineola, NY 11501-4822

> Re: Nassau County Fire Training Center (Site #130042) Approval for Construction Work in a Restricted Area

Dear Mr. Witkowski:

The NYSDEC has reviewed your July 29, 1997 request for approval to perform shallow excavations, to a depth of 3 feet, in an area underlain by contaminated soils at the above-referenced site. Provided that the asphalt cap is patched in disturbed areas beyond the limits of the concrete slabs, and that excavated soils are monitored and managed in accordance with the County's proposal, the NYSDEC's environmental protection concerns are addressed. Concerns for worker and community health and safety will be addressed by the New York State Department of Health.

Therefore, with respect to the NYSDEC's role in implementing deed restrictions at the Fire Training Center, the proposed construction is approved. Please call me at (518) 457-3395 if you have any further questions or concerns.

Sincerely,

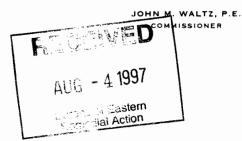
George W. Heitzman, P.E. (Senior Environmental Engineer

Division of Environmental Remediation

cc: S. Bates (NYSDOH)

THOMAS S. GULOTTA





COUNTY OF NASSAU

DEPARTMENT OF PUBLIC WORKS

MINEOLA, NEW YORK 11501-4822

July 29, 1997

New York State Department of Environmental Conservation Division of Hazardous Waste Remediation Eastern Remedial Projects Section 50 Wolf Road Albany, New York 12233-4011

Attn: Mr. George W. Heitzman, P.E.

Re: Nassau County Fireman's Training Center

Site #130042

Deed Restrictions/Construction Work

Dear Mr. Heitzman:

As part of the Record of Decision for the remediation of the Fireman's Training Center (FTC), Deed Restrictions were selected as the remedy to address shallow soil contamination at various locations on the FTC property. These Deed Restrictions were officially established by the County on December 18, 1996.

The Deed Restrictions require prior written approval by the New York State Department of Environmental Conservation and the New York State Department of Health for any work in the restricted areas that would result in the disturbance or excavation of contaminated soils.

I have been informed by the Nassau County Fire Service Academy (NCFSA) that they would like to construct a Confined Space Rescue Training Area on the edge of one of the Deed Restricted areas, map of Deed Restricted Area and a copy of the NCFSA letter are attached. This work will require several shallow excavations (<3 ft.) for the construction of a slab and for some footings. In order to accomplish this work, the Hazardous Waste Services Unit (HWSU) will provide all Health and Safety monitoring during the excavation work, and if contaminated soil is encountered, the HWSU will have it segregated out and have it disposed of in accordance with all Federal, State and local regulations. A copy of our proposed Health and Safety monitoring procedures is attached.

Considering the above information, I therefore request permission to proceed with the construction of the Confined

Mr. George W. Heitzman, P.E.

July 29, 1997 Page Two

Re: Nassau County Fireman's Training Center

Site #130042

Deed Restrictions/Construction Work

Space Rescue Training Area. If there are any questions or you require additional information, please contact me at $(5\overline{1}6)$ 571-6850.

Very truly yours,

Peter J. Witkowski

Geten), Withousai

Director of Hazardous Waste Services

PJW

Attachments

cc: James A. Oliva, Division Head of Sanitation & Water

Michael K. Gilroy, Superintendent of the NCFSA Robert A. Lincoln, Chief Instructor NCFSA Thomas Sheridan, Maintenance Supervisor NCFSA

NASSAU COUNTY FIRE SERVICE ACADEMY

300 WINDING ROAD · OLD BETHPAGE, NEW YORK 11804-1323 · (516) 572-8600 · FAX [516] 572-8607



MICHAEL K. GILROY
Superintendent

DATE:

July 28, 1997

TO:

Mr. Peter Winkowski

Director of Hazardous Waste Services

FROM:

Thomas Sheridan

Maintenance Supervisor

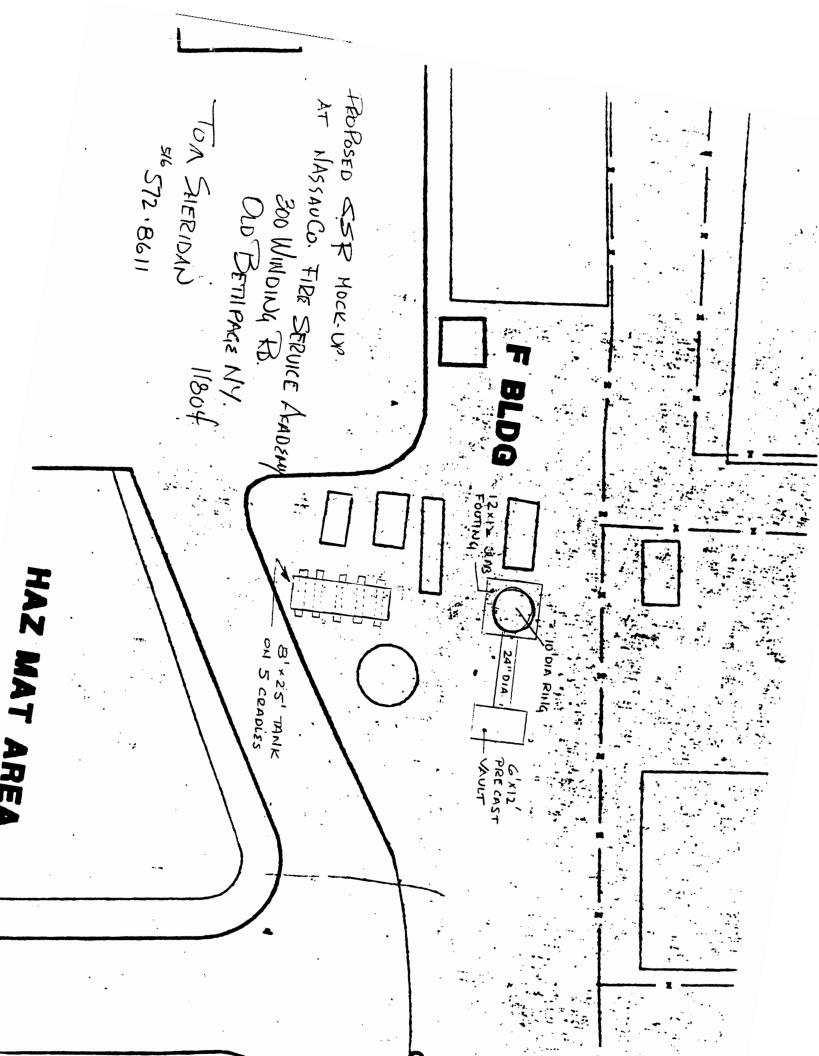
RE:

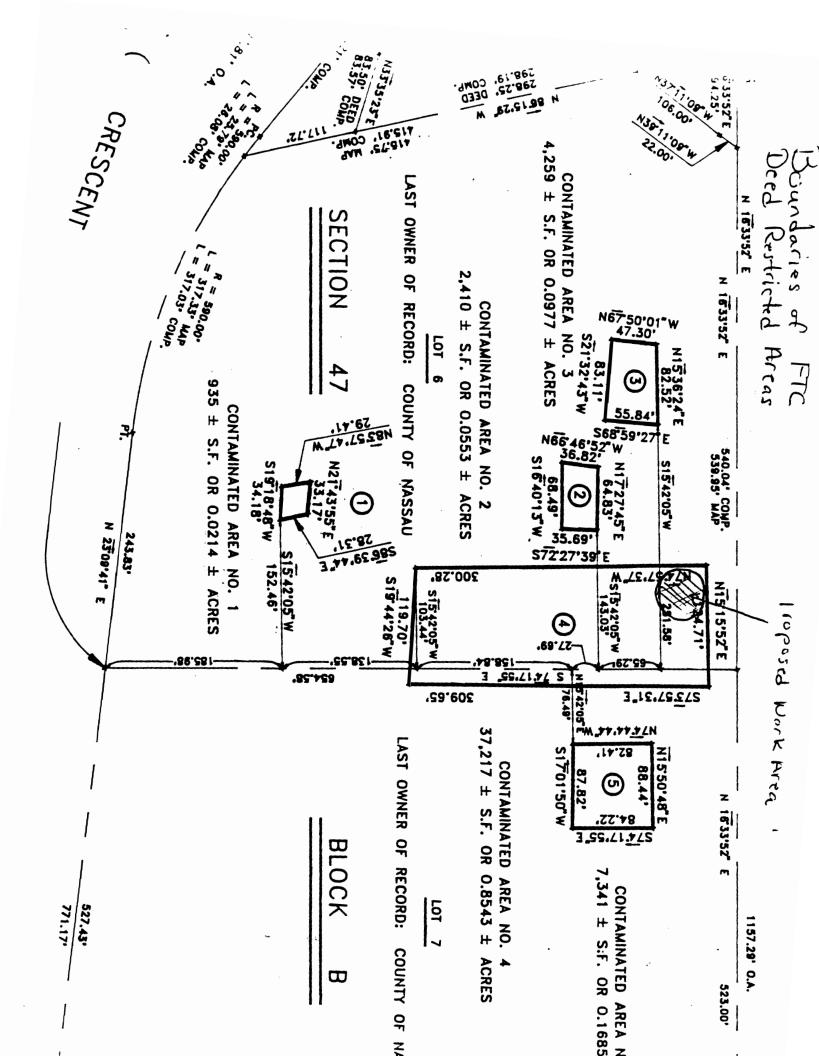
Confined Space Rescue Training Area

In an effort to keep up with current demands, we are looking to expand our Confined Space Rescue (CSR) Training area. The CSR mock-up would be located in the existing tank farm area allowing for more realistic setting of a typical rescue.

This CSR mock-up would consist on precast concrete rings and vault connected via a 24" dia ADS plastic pipe. We would also utilize a 8' x 25' long steel tank to be installed above grade on cradles. In an effort to maintain a sound base for this mockup, we would need to pour concrete footings and slab. We would like to pour a 8" thick slab with 3 ft. deep footings for the 10 ft. diameter rings and for the cradles on the 25' long tank (see attacched sketch)

We would truly appreciate any help you can extend to us to expedite this project.





NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS HAZARDOUS WASTE SERVICES UNIT

HEALTH AND SAFETY PLAN

CONFINED SPACE RESCUE TRAINING AREA
NASSAU COUNTY FIREMAN'S TRAINING CENTER
OLD BETHPAGE, NEW YORK

Prepared by:
Nassau County Department of Public Works
Hazardous Waste Services Unit
170 Cantiague Rock Road
Hicksville, NY 11801

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1.0 INTRODUCTION

This document is a compilation of minimum health and safety and emergency response requirements to be followed by the employees during construction of the Confined Space Rescue Training Area at the Nassau County Fire Training Center (NCFTC).

1.1 PURPOSE

General health and safety requirements for the safety of NCFTC personnel and the public during the construction of the Confined Space Rescue Training Area at the NCFTC site are outlined in this document.

The health and safety requirements are based on a review of currently available information about soil, water and air contamination at the NCFTC, and a preliminary analysis of potential hazards associated with construction activities at the site. Health and safety procedures and equipment are required for construction activities at the NCFTC to minimize the potential for exposures to on-site personnel and the public.

1.2 SCOPE OF WORK

The NCFSA will construct a Confined Space Rescue Training Area on the edge of a Deed Restricted Area. The work will require several shallow excavations of less than 3 feet deep for the construction of a slab and some footings.

1.3 SITE MAP

2.0 ORGANIZATION

The following personnel are designated to carry out he stated job functions on-site:

2.1 POSITION DESCRIPTIONS AND RESPONSIBILITIES

2.1.1 Project manager: Chief John Baroni

The project manager has full responsibility for implementing and executing an effective program of personnel protection and accident prevention. He may delegate authority to expedite and facilitate any application of the investigations.

2.1.2 Health and Safety Officer: James Kardos

The Health and Safety Officer is responsible for ensuring that all on-site personnel are trained in field techniques and the proper selection, use and maintenance of personal protective equipment. Other responsibilities include providing technical assistance to the Project Manager regarding data interpretation as pertaining to worker safety. All operations will be monitored to ensure compliance with this Health and Safety Plan. The Health and Safety Officer is responsible for the

development of emergency procedures. Should unsafe work conditions arise, he is authorized to stop work.

3.0 LEVELS OF PROTECTION

All personnel shall be properly trained and familiar with the use of Personal Protective Equipment (PPE). PPE will be used during all on-site activities and the level of protection will vary depending on the nature of the task and the associated health risk as determined by the Health and Safety Officer. A minimum of Level "D" protection will be employed during all operations. Level "C" protection will be available and will be utilized should air monitoring or discovery require increased respiratory protection. Descriptions of USEPA level requirements follow. Items followed by an "*" are optional. In addition to the Personal Protective Equipment listed below, the following general safety equipment will be available for use as necessary: first aid kit, radio, fire extinguishers, eye wash, emergency shower, wind direction finder, life lines, barricades.

3.1 LEVEL "D" PROTECTION

- o Coveralls
- o Gloves
- o Boots/shoes, leather or chemical resistant, steel toe and shank
- o Disposable boots (outer), chemical resistant *
- o Safety glasses or chemical splash goggles *
- o Hard hat
- o Escape mask *

3.2 LEVEL "C" PROTECTION

- o Air Purifying Respirator
- o One-piece tyvek suit
- o Coveralls *
- o Gloves (outer), chemical-resistant
- o Gloves (inner), chemical-resistant *
- o Boots, chemical-resistant, steel toe and shank
- o Disposable boot covers, chemical-resistant *
- o Hard hat

4.0 MONITORING EQUIPMENT

Unit personnel working on-site will have available to them the following equipment to monitor the atmosphere:

- 1. Foxboro Century Organic Vapor Analyzer (OVA) 128 GC
- 2. Hnu HW 101 WITH 102 eV Probe
- 3. GASTECH GT405 Combustible Gas, 02, CO, H2S indicator

Specific instructions for the care and use of this equipment, as well as any questions concerning calibration and maintenance logs should be obtained from the Hazardous Waste Services Unit Health and Safety Officer, James Kardos. Site PPE requirements may be modified based upon the results of field monitoring data obtained.

5.0 SITE SAFETY

The following health and safety procedures shall apply to all on-site personnel during excavation operations. These include identification of unsafe conditions, site monitoring, sample handling, prohibited practices and personal protective equipment.

Many general health and safety practices which apply to everyday situations must be followed as well.

5.1 UNSAFE CONDITIONS

All personnel will ensure that any unsafe conditions, practices or circumstances on-site are immediately addressed and eliminated. Supervisors shall be notified promptly.

5.2 FIRE PROTECTION

Fire extinguishers shall be readily available during all site operations. They shall be inspected, serviced and maintained in accordance with the manufacturer's instructions. Any fire extinguisher which is used will be immediately recharged or replaced. Smoking in or around the work site is strictly prohibited.

5.3 SITE MONITORING AND ACTIONS LEVELS

5.3.1 During Excavation

Upon surface penetration, Level "D" background monitoring will continue in accordance with the action levels. In addition, breathing zone values will be obtained frequently. All non-essential personnel will have been cleared from the area prior to the start of excavation. Breathing zone monitoring will include obtaining levels of organic vapors, combustible gases and oxygen in and around the breathing space of workers. Any levels detected and confirmed to be in excess of the established action levels will be immediately addressed and the adequacy of the prescribed level of protection will be reevaluated. Action levels to be observed during excavation are as follows:

- o Level "D" Background to 5 units organic vapor as metered by HNu (10.2eV)
- o Level "C" 6 to 10 units, greater than 10 units cease operations
- o 19.5% to 25% Oxygen Operations continue with caution
- o Less than 10% LEL Operations continue with caution
- o 10% to 25% LEL Continuous monitoring with extreme caution
- o Greater than 25% LEL Explosion hazard. Cease operations

5.4 SAFE WORK PRACTICES

The following practices are strictly prohibited:

- o Eating, drinking, smoking in the work areas
- o Igniting flammable liquids on-site
- o Use of improper or modified safety equipment
- o Use of contact lenses on-site

5.5 COMMUNICATIONS

All means of on-site communications shall be agreed to by all parties prior to commencement of work.

5.6 DECONTAMINATION

To prevent transfer of contaminants, all personnel shall be decontaminated, and PPE shall be either decontaminated or disposed of in accordance with Hazardous Waste Services Unit Standard Operating Procedures. This document was adapted from EPA Standard Operating Procedures. All tools and monitoring equipment shall be decontaminated prior to leaving the site.

Personnel working with hazardous substances may become contaminated in a number of ways:

- 1. Contacting vapors, gasses, mists or particulates in the air.
- 2. Being splashed by materials while sampling or opening containers.
- 3. Walking through puddles of liquids or on contaminated soil

Protective clothing and respirators help prevent the wearer from becoming contaminated or inhaling contaminants, while good work practices help reduce the contamination of protective clothing, instruments and equipment.

PERSONAL DECONTAMINATION

Upon leaving the exclusion zone for lunch or at the end of the day, personnel will be required to remove all contaminated protective clothing/equipment. Any disposable or contaminated PPE will be discarded prior to leaving the work area. Field equipment (i.e., shovels, tools, etc.) Will remain in the exclusion zone. All contaminated PPE (i.e., suits, gloves, respirator cartridges, etc.) Will be considered contaminated and placed into drums.

DECONTAMINATION OF FIELD EQUIPMENT

All gross contamination of tools will be removed by brushing and/or rinsing with soap and water.

The decontamination of heavy equipment will be undertaken when all on-site activities have been completed. This will be done using a portable steam generator to wash the potentially

contaminated areas of equipment.

6.0 CONTAMINATED SOIL

If contaminated soils are encountered during the excavation, the soils will be segregated out and stockpiled on site. The soils will be placed on and covered by a heavy gauge plastic liner until proper disposal can be accomplished. Disposal will be in accordance with all applicable Federal, State and local regulations.

7.0 EMERGENCY PROCEDURES

In the event of a health and safety emergency, appropriate corrective measures must be taken immediately to assist the injured or exposed and to protect others from hazard. Emergency personnel should be notified immediately. First aid/CPR should be administered by trained personnel. All emergency telephone numbers, including ambulance, fire department, police and hospital should be obtained prior to commencement of work and kept readily available (please see Section 7.2)

7.1 ADVERSE WEATHER CONDITIONS

In the event of adverse weather conditions, the Health and Safety Officer will determine if work can continue without endangering the health and safety of on-site personnel. Items to be considered in making this determination should include:

- o Potential for heat stress
- o Inclement weather-related working conditions
- o Limited visibility
- o Potential for electrical storms

7.2 EMERGENCY TELEPHONE NUMBERS (Area Code 516)

NASSAU COUNTY POLICE DEPARTMENT	911
AMBULANCE	911
NASSAU COUNTY HEALTH DEPARTMENT	
24 Hour Emergency	795-0880
NYSDEC (STONY BROOK)	444-0320
NASSAU COUNTY FIRE MARSHAL	572-1000
HAZARDOUS WASTE SERVICES UNIT	571-6850

8.0 HAZARDOUS SUBSTANCES ON SITE

8.1 FLAMMABLE LIQUIDS

Possibly used in training activities

- Methyl ethyl ketone
- Acetone
- Fuel Oils

8.2 COMBUSTIBLE GAS

Potential for gas migration from the Old Bethpage Solid Waste Disposal Complex

- Methane

8.3 HALOGENATED VOLATILE ORGANIC COMPOUNDS

Found in groundwater sampling in the vicinity

- 1,2 Dichloroethane
- 1,1 Dichloroethane
- Vinyl chloride
- Methylene chloride
- Trichloroethane
- Chloroethane
- Tetrachloroethane

8.4 NON-HALOGENATED VOLATILE ORGANIC COMPOUNDS

Found in groundwater sampling in the vicinity

- Benzene
- Toluene
- Ethyl benzene
- Xylenes

New York State Department of Environmenta 50 Wolf Road, Albany, New York 12233-7010

bcc: R. Burger

S. McCormick G. Heitzman

May 8, 1997

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County Dept. of Public Works Mineola, NY 11501-4822

> Re: Nassau County Fire Training Center (Site #130042) CDM Contract Multiplier

Dear Mr. Witkowski:

The NYSDEC has considered the information provided by CDM in their February 12, 1997 letter to Ralph Burger. Without additional documentation (ie. completion of the EQBA Title 3 eligibility forms), the multiplier specified in the County's contract with CDM cannot be justified. However, the NYSDEC is willing to reimburse Nassau County according to the terms of our standby contract with CDM. These terms include a indirect cost rate of 1.666 and a profit factor of 0.05, for an overall multiplier of 2.8. Labor rates would be limited to those specified in the County/CDM contract.

In order to reimburse at the 2.8 overall multiplier, other terms of the NYSDEC/CDM standby contract will also be applied to the County's requests for reimbursement. Of particular concern are Direct Non-Salary Costs, which are summarized on the enclosed schedules 2.10(b), (c) and (d). You will note that CADD, Word Processing and PC time, and in-house copying costs are included in the standby contract indirect rate, and cannot be billed separately.

I believe this represents a workable solution in the absence of detailed cost information from CDM. Please call me at (518) 457-3395 if you wish to discuss this further.

Sincerely,

George W. Heitzman, P.E.

Senior Environmental Engineer

Division of Hazardous Waste Remediation

cc: M. Memoli

W. Hennenberger

Schedule 2.10(b) Maximum Reimbursement Rates for Direct Non-Salary Costs

Item

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Max. Reimbursement Rate (Specify Unit)

- A. Sample Analysis Rate (In-House Cost Only, For Subcontracts See Schedule 2.10[f])
 - 1.
 - 2. To be subcontracted
 - 3.

B. Miscellaneous

- 1. Telephone & Fax at receipted cost
- 2. Federal Express at receipted cost
- 3. CADD, Word Processing Machine Connect Time & PC included in indirect cost rate
- 4. Blue prints & photocopies included in indirect cost rate or subcontracted as a direct charge.
- 5.* Personal Protective Equipment Level D \$11/man-day (see below)
 Personal Protective Equipment Level C \$34/man-day (see below)
 Personal Protective Equipment Level B \$68/man-day plus cost of air as a direct charge (see below)
- *A. Minimal Level D Equipment: 1) tyvek coveralls, 2) steel toe and shank boots/shoes, 3) safety glasses, 4) hard hat, and 5) any additional OSHA required equipment.
- B. Minimal Level C Equipment: 1) tyvek coveralls, 2) steel toe and shank boots/shoes, 3) chemical resistant gloves, 4) hard hat, 5) NIOSH approved, air purifying, canister equipment respirator, and 6) any additional OSHA required equipment.
- C. Minimal Level B Equipment: 1) tyvek coveralls, 2) steel toe and shank boots/shoes, 3) chemical resistant gloves, 4) hard hat, 5) breathing apparatus either bottled or airline, 6) any additional OSHA required equipment.
- D. Cost of air is the cost of refilling back pack air cylinders, cascade cylinders, or generator costs for airline pumps and shall be a direct charge.
- E. Personal items such as underwear, ear plugs, glove liners, and boot liners are not reimbursable. Training is reimbursable through the indirect cost rate.
- F. Flashlights, air horns, duct tape, clean up supplies, escape masks and 2-way radios are a direct charge based on site specific needs negotiated with each work assignment.
- G. Air monitoring equipment shall be a direct charge as reflected in the equipment listing and terms.
- H. PPE rates will not be paid if all minimal equipment is not used.

Assume Heat COM Suffer From EDN \$200

Schedule 2.10(c)2

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17

Maximum Reimbursement Rates for Consultant/Subconsultant - Owned Equipment

	Estimated Purchase Price x 85%	Capital Recovery & Usage Rate (\$/day)
Aic Sanolina Dann	170	~
THE AIR DIAM	220) V
	607	ſ
Air Calibrator	115	
Anger 2 * & 4"	115	
Baronneler	10	-
5 Min. Air Escape Pack	190	6
Centrifugal Pump	390	10
Conductivity Meter	61	
Data Logger - 4 ch.	2,600	93
Data Logger - 2 Ch.	2,800	20
Dissolve Oxygen Meter	1,275	13
Dracger Pump	250	2
Explosimeter	1,520	~
Generator - 5000 vz.	1,450	32
HCN ALLIN	1,400	9
Magnetic Cable Locator	. 518	4
Metersongical Station	1,040	=
Oil-Water I.P.	1,830	2.5
OVA Flame Analyzer	4,700	37
ph - Tranp Meta	335	3
ph - Temp - Conductivity Meter	320	3
STIME COSTS - COVE	3,800	23
Photofearer - myO (0)	3,800	23
Radiation Meter	280	10
Two-Way Cadio	210	3
Sieve Set	09	•
Suhm, Pront 2"	375	3

The following minor items will be reimbursed based on receipts

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- Serub brush
- Poly sheeting
 - Spotlight
- Stainless steel trowels
- Buckets
- Shovels/picks/planters
- Tape 50' and 100' Drum liner/55 gal./4mil.
- Eye flush Rope 1/8" poly Rope 1/4" poly
 - Boiler brush
- Chloroform tubes . Cleaner/liquid/phosphorous free
 - Hexane tubes
- HNu calibration gas 0125439186
 - ron test kit
- Chronium test kit

Schedule 2.10(d) Per Diem Reimbursement Rates for Overnight Travel (Lodging, Meals and Transportation)

Per Diem Locality		Per Diem Rates
Any N.Y. State location Out of State Travel	not below	\$66 100
City	County	
NEW YORK		
Albany	Albany	90
Auburn	Cayuga	82
Batavia	Genesee	82
Binghamton	Broome	84
Buffalo	Erie	94
Canton	St. Lawrence	78
Catskill	Green	74
Corning	Steuben	86
Elmira	Chemung	80
Glens Falls	Warren	82
Ithaca	Tompkins	87
Jamestown	Chautauqua	69
Kingston	Ulster	82
Lake Placid	Essex	104
Monticello	Sullivan	89
New York City	Bronx, Brooklyn,	174
	Manhattan, Queens &	
	Staten Island boroughs:	
	Nassau & Suffolk Counti	es
Niagara Falls	Niagara	108
Owego	Tioga	70
Palisades	Rockland	84
Poughkeepsie	Dutchess	94
Rochester	Monroe	92
Romolus	Seneca	92
Saratoga Springs	Saratoga	96
Schenectady	Schenectady	88
Syracuse	Onondaga	89
Troy	Rensselaer	88
Utica	Oneida	85
Watertown	Jefferson	82
Watkins Glen	Schuyler	98
West Point	Orange	76
White Plains	Westchester	138

- 1. The per diem reimbursement rates represent a daily rate for both meal and lodging expenses incurred by Engineer's staff. Per diem will be reimbursed only if the traveler was in overnight status. Proof of overnight status must be supported by the lodging receipt. Meal costs are not allowable if traveler is not in overnight status.
- 2. The applicable per diem rate will be determined by the place of lodging.
- 3. These reimbursement rates shall be held firm for a period of at least three years from the date of contract execution. Thereafter, at the discretion of the Department or the Engineer, new rates may be negotiated. There shall be no retroactive adjustments of payments as a result of renegotiated reimbursement rates. These rates are effective until such time that revised rates are approved by the State, and incorporated as a Contract amendment.
- 4. Reimbursement for the use of personally-owned cars will be limited to a maximum mileage rate of 23 cents per mile, or the actual reimbursement rate of the firm, whichever is less. Tolls and parking must be receipted.
- 5. Reimbursement for long distance travel by air, train or bus with receipts will be limited to coach rates.





New York State Department of Environmental Conservation Division of Environmental Remediation

MEMORANDUM

TO:

Sondra King, Bureau of Program Management

FROM:

كر George W. Heitzman, Bureau of Eastern Remedial Action

SUBJECT:

Nassau County Fire Training Center (Site #130042) / CDM Multiplier

DATE:

May 6, 1997

This is in response to your April 16, 1997 memo regarding the EQBA Title 3 eligible multiplier for the above-referenced project. For some reason, CDM is reluctant to prepare and release the Title 3 forms and recent financial statements. Unfortunately, Nassau County is caught in the middle because they no longer have CDM under contract, and have little leverage to get the forms out of them. They have paid CDM fully, according to the terms of their contract, and so the County now bears the burden of a lower approved multiplier. I would like to propose a means of fairly reimbursing the County that we can all live with.

It seems from your memo that the concern is with direct costs which may also be included in the indirect multiplier. Would it be acceptable to apply the Indirect Cost Rate and Maximum Direct Non-Salary Costs in CDM's standby contract to payments submitted by Nassau County? We could simply attach the standby contract Schedules 2.10 (b) and (c.) to the payment request. Because the salary rates under the County's contract are lower than those under the Standby Contract, there seems to be no risk of over-reimbursing the County. I believe the County would accept this alternative because the 2.75 standby contract overall multiplier is better than the 2.5 they are currently receiving, even if it is not the 2.84 in their contract. The difference in eligible direct costs is small in comparison to the multiplier. 2.89

Please let me know if this is acceptable to your unit, or whether some modification is appropriate. I hope that we can arrive at a reasonable solution to this problem. Please call me at 7-3395 if you wish to discuss this further.

5/8/97

Met with Ralph and Sondra. After discussion,
Ralph said he could agree to this if I agreed
to apply the indirect rates during payment review.

cc: R. E

R. Burger

1. 2



Camp Dresser & McKee

consulting engineering construction operations 100 Crossways Park West, Suite 415 Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864



RECEIVED

April 25, 1997

MAY - 6 1997

Bureau of Eastern
Remedial Action

Mr. George Heitzman New York State Department Environmental Conservation 50 Wolf Road Albany, NY 12233-7010

Subject:

Fireman's Training Center Overhead Note

Dear Mr. Heitzman:

In a February 12, 1997 letter to Ralph Burger, Camp Dresser & McKee provided a comparison of contract financial terms and conditions between two CDM contracts: the Fireman's Training Center agreement and CDM's superfund standby contract. Since the submittal of that letter, we have not received a response from NYSDEC, nor has Nassau County and the reimbursement issues remain unresolved.

We would appreciate it if you contacted us regarding the February 12th letter if there are any questions. Otherwise, we urge you to expedite the resolution of any outstanding issues and to contact Mr. Withowski of the NCDPW as soon as possible. We appreciate your help in this matter.

Very truly yours,

CAMP DRESSER & MCKEE

Michael A. Memoli, P.E.

Partner

cc: Peter J. Witkowski, NCDPW

File: (FTC 2.7)

(dt31/ftc)



New York State Department of Environmental Conservation

MEMORANDUM

TO: FROM:

SUBJECT:

DATE:

George Heitzman, Remedial Section B, BERA

Sondra King THRU Ralph Burger, Cost Analysis & Payment Section, BPM // / Nassau County Fireman's Training Center/CDM Consultant Contract Multiplier Site

#1-30-042

April 16, 1997

In response to your 4/14/97 memo, we offer the following:

Comments have been provided on CDM's contract and multiplier with Nassau County on more than one occasion covering a span of several years --1990 thru 1996(copies attached). Repeatedly, the comments have been the same -- the contracts are not identical and, thus, CDM, must follow our standard procedures for obtaining multiplier approval. In this latest submission, CDM notes that the contracts are similar (not identical as initially claimed) and that any differences are offset by certain restrictions and definitions in the county's contract. Since the contract terms are not identical and we have not received anything to justify a higher multiplier, double billing could occur with some costs being direct charged and then indirect charged a second time through the multiplier. CDM is limited to 2.5 (138% indirect + 5% fee) for this project.

cc: J. Snyder

RECEIVED

APR 1 7 1997

Bureau of Eastern Remedial Action

New York State Department of Environmental Conservation

Division of Hazardous Waste Remediation 50 Wolf Road, Albany, New York 12233-7010



Michael D. Zagata Commissioner

April 1, 1996

Mr. Curtis F. Velsor, Jr. Senior Associate Camp, Dresser & McKee 100 Crossways Park West Woodbury, New York 11797

Re: Title 3 Projects

Dear Mr. Velsor:

In response to your March 11, 1996 letter, I would like to clarify a few issues about your understanding of how CDM's approved standby multiplier may be applied to Title 3 work. There are basically two ways of obtaining an approved multiplier for a Title 3 project:

- 1. If a standby consultant already has an approved multiplier under a SSF standby contract, that multiplier may be used for Title 3 work provided that the terms and conditions of the Title 3 contract are essentially the same as those found in the SSF standby contract. This includes not only the indirect cost rate and fees, but also other cost items such as labor, direct costs, etc.
- 2. If option one is not feasible, the consultant must submit financial information including:
 - recent set of financial statements;
 - Title 3 Forms Nos. 5 and 6; and
 - a reconciliation of Form #5 to the financial statements.

For either option, there are certain protocols which should be followed. The Consultant should submit their contract to the DEC Project Manager for a Title 3 eligibility determination. Once eligibility is determined, the consultant should then submit their multiplier information to the DEC Project Manager who will forward it to our Cost Analysis & Payment Section for review. The Contract Development Section has little direct involvement and should not be used as the point of contact for Title 3 work.

I have been informed by the Cost Analysis & Payments Section that contracts for the three projects mentioned in your letter have already been reviewed. Listed below are the results of those reviews:

- Cortese Landfill approved for 2.8 multiplier (166% indirect and 5% fixed fee)
- Brookfield Avenue Landfill RIFS contracts determined not similar (differences in

- salary rates, interim payment overhead rate and other direct costs)
- Nassau County Fireman's Training Center Design contracts determined not similar (differences in overhead rates and direct costs)

In a separate 2/22/96 letter to Gerard Burke, you supplied various multiplier information for the Cortese site. A multiplier has already been approved for that project so no additional information is needed for this site. If the remaining two contracts (Brookfield and Nassau) can be amended to make the cost terms similar to the Cortese contract, the same multiplier could be approved for these contracts. Otherwise, the financial items listed under Option 2 above are required. The submittal included in the 2/22/96 letter is not acceptable, since it is based on '96 projections and is missing the financial statements and reconciliation.

We have received copies of your March 25, 1996 letters (attached) to several municipalities indicating the DEC has approved CDM's multiplier of 2.8 for Title 3 contracts. This is a mischaracteristic regarding our recent discussions with Mr. Memoli. As indicated during those discussions and above, other fiscal terms of the contracts (direct salary rates, direct costs, etc.) must also be the same to receive the 2.8 multiplier. Please review your Brookfield Landfill and Nassau Fire Training Center contracts relative to comments forwarded from the DEC Project Managers and as listed above. Revised contracts to address these comments should be forwarded through the DEC Project Managers.

On a separate item involving renegotiation of CDM's overhead rate, I'd like to point out that the request to renegotiate CDM's standby contract should come directly from Mike Memoli, since he is the named contact person in that contract. If CDM wishes to renegotiate its contract, I'd like to suggest sometime in July as a good time to make that request, since we are currently negotiating other contracts.

I hope this letter clarifies the establishment of Title 3 multipliers. If you have any additional questions, please contact the DEC Project Managers directly for assistance.

Sincerely,

Raymond E. Lupe, P.E.

Chief

Contract Development Section Division of Hazardous Remediation

Attachment
cc: Mike Memoli (CDM)
Ralph Burger
Bob Cozzy

Gerard Burke George Heitzman Joe O'Connell

15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO:

Bob Cozzy

FROM:

Dave Smith THRU Jack McKeon

SUBJECT:

Nassau County FTC (Site #1-30-042)

DATE:

FEB 9 1994

Returned herewith is the engineering services contract between Nassau County and CDM.

Your memo of December 29, 1993 states that "CDM has claimed that the terms of this contract are identical to their standby contract with DEC". Ralph's cursory review quickly found on page 3 - the overhead (indirect) costs are not the same and on page 4 software costs listed in this contract as a direct cost is included in the standby as indirect.

Thus, please advise Nassau County and CDM that they should prepare and submit the standard Title 3 Form #5, Indirect Cost Rate Schedule.

Once the forms are submitted, we will review them and factor in applicable information we have in the CDM standby contract in our determination of their indirect cost rate.

Please note, we are not following subcontract management fees on Title 3 contracts.

cc:

R. Burger

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New York State Department of Environmental Conservation

MEMORANDUM

TO: FROM: Dave Smith, Contract Development Section
Bob Cozzy, Municipal Projects Section
Nassau County Fire Training Center (Site #13

SUBJECT:

December 29, 1993

DATE:

Attached for your review and comment is the engineering services contract between Nassau County and Camp, Dresser & McKee (CDM). This contract was submitted with the County's EQBA grant application for the Remedial Design phase of the project.

CDM has claimed that the terms of this contract are identical to their standby contract with DEC, and should therefore be fully eligible. Please verify whether this is the case. Note that their contract includes a 5% administrative markup on subcontracts.

Please contact George Heitzman at 7-1641 with any questions or comments.

1.03

New York State Department of Environmental Conservation

MEMORANDUM

TO:

DATE:

Bob Cozzy, Chief, Special Projects Section, Bureau of Eastern Remedial

FROM: SUBJECT:

Ralph Burger, Associate Accountant, THRU: Dave Smith Chaef, Contract

Development Section, Bureau of Program Management

Nassau County FTC RI/FS/Malcolm Pirnie Section D - Form #5 and Section E

(Site 1-30-042)

Please refer to your 4/11/90 transmittal memo on the subject project.

Form #5 should be filled out using actual costs which correspond to the latest fiscal year of the financial statements supplied for Section E. The submittal indicates that the fiscal year ending 12/31/89 would be the appropriate time period. Form #5 was filled out using estimates for the fiscal year 1990 and is therefore not auditable and not reconcilable to the financial statements.

For future cost reporting form submittals, please advise Title 3 consultants and municipalities to submit complete packages for review. CDS will not review partial submittals.

cc: J. McKeon

Market Town



New York State Department of Environmental Conservation Division of Environmental Remediation

MEMORANDUM

TO:

Ralph Burger, Cost Analysis & Payment Section, BPM

FROM:

George W. Heitzman, Remedial Section B, BERA

SUBJECT:

Nassau County Fire Training Center (Site #130042), CDM Multipli

DATE:

April 14, 1997

Recently, CDM forwarded to you an analysis comparing their multilpier on various municipal contracts with their standby contract with NYSDEC (copy attached). Last week I received a phone call from Nassau County asking whether we had made a multiplier determination for EQBA eligibility. The County is preparing to submit their final RI/FS and Design payment, and we would like to close out the contract.

Please review CDM's submittal and determine their eligible multiplier. If you have any questions, please call me at 7-3395.

bcc:

S. McCormick/G. Heitzman

RONNIE LEE

15- 1, .

COUNTY OF NASSAU

Inter-Departmental Memo

To:

File

From:

Edward F. Visone

Date:

March 31, 1997

Subject:

Fireman's Training Center

Groundwater Treatment Facility Contracts S81021-2 G,H,P & E

Attached is a copy of the minutes of March 20, 1997, for the referenced project as prepared by Lockwook, Kessler & Bartlett, Inc.

Edward F. Visone Civil Engineer II

EV:rhm

Attachments: 4

cc: James A. Oliva

Division Head of Sanitation & Water Supply

Frank A. Scicchitano

Director of Environmental Construction

Peter A. Witkowski

Director of Hazardous Waste Services

Michael Mason

New York State, Department of Environmental Conservation

G. Edward Tabor

New York State Department of Environmental Conservation

All Attendees



Minutes of BI Monthly Meeting # 21

Subject: Fireman's Training Center

Ground Water Treatment Facility Contract #S81021-2 G,H,P & E

Held At: L.K.B. Field Office

Date of Meeting: March 20,1997 10:30 A.M.

Attendees: Edward Visone NCDPW-S&WS

NCDPW-HWSU Joe Walker William Meilink NC-DPW **NYS-DEC** Michael Mason NYS-DEC Ronnie Lee Edward Tabor NYS-DEC Bob O'Neill Silverite Silverite Jim Harris Welsbach Steve Scheer

Nick Provenzano JKB

John Koziarz McCullagh

Jim Beach LKB
Steve Hanuszek LKB
John Munro LKB
Bruno Steblai LKB

Discussion:

Mr. Hanuszek opened the meeting by asking if there were any comments on the minutes of the previous meeting. There were none.

1. Status of the CPM Schedule - Mr. Beach stated that as of now, the progress On-Site is off pace with the schedule. Mr. Beach indicated that following this meeting a review of the critical work ahead for the mechanical subcontractor for work in the building will take place. Mr. Beach stated by the next meeting, the March CPM will be updated and we will have a more concise update as to the time lost on the project. Mr. Hanuszek noted a meeting was held on site this week to focus on the contractors progress of work in specific areas, namely the On-Site Transmission line, transmission line in the Park and the building erection. He noted that Silverite's response to the concerns was as follows: the On-Site Transmission line will be ready for the electrical conduit installation by 3/24/97. Silverite has affirmed their commitment to complete the paving and clean up by April 15, 1997. By the first of April, Silverite will concentrate on the completion of the transmission piping installation followed by Welsbach's electrical conduit. Following the pipe installation the remaining placement of blend on the cart path will take place, followed by the

paving operation, and then the completion of landscaping. The remaining work in the Park will be completed by May 15, 1997. Silverite acknowledged that a problem exists with their subcontractor for the panel erection. They requested one week to rectify this matter. LKB noted that the interior steel work in the high-bay area had to be complete by April 4, 1997. Otherwise, the electrician can not start his work by April 7, 1997. Mr. Hanuszek pointed out to Silverite that any delays in this work will effect the critical path of the project. Silverite acknowledges the severity of the situation and stated they will do what is necessary to complete this work.

Status of the shop drawing submittals - Mr. Hanuszek reported the following.

Silverite: 95% submitted with at least 85% Approved as noted.

McCullagh: 90% submitted with at least 100% Approved as noted.

JKB: 92% submitted with at least 95% Approved as noted.

Welsbach: 60% submitted with at least 70% approved as noted.

- **3.** The status of RFI's Mr. Hanuszek reported that, G-57 was just received by LKB for review. Otherwise, Silverite has no outstanding RFI's. JKB had one RFI regarding the use of copper piping. LKB had verbally indicated to Mr. Provenzano that copper will be acceptable for the hot water glycol system. Now they must formally submit catalog cuts for approval.
- **4. Status of Coordination Drawings Mr.** Munro reported that the Coordination Drawing for the above slab work, has been completed and that only some minor items are to be incorporated. This drawing will be submitted for review by the first week of April. Mr. Munro noted that the work on Winding Road and the recharge basin, first needs a back ground drawing distributed prior to developing the Coordination Drawing.

Work Progress On-Site

Status of Operations Building area - Mr. Munro reported that building erection is progressing at a slow rate. Currently, the roofing installation for building # 3 is half way through completion. Also, the installation of the wall panels is progressing at a slow rate. At this point, only the installation along the "A" line of the building Col. line 6 to 12 is under way.

Work Progress Off-Site

Bethpage State Park -Mr. Munro reported that all work pertaining to the well drilling in the Park from ORW-1 thru ORW-7 is complete. The transmission line trenching is complete to a point approximately 200' past the fairway crossing on the black course. The electrical conduit is complete to this point as well. The valve vaults for ORW-1 thru ORW-6 are in place, ORW-4 vault however, is experiencing the effects of a ground water condition in this area. The Control Building slabs are complete for ORW-5,6 and 7. The placement of blend material will be completed by tomorrow. The asphalt phase of the operation will then start within the next two

weeks. The elevations for the valve vaults for ORW-4, due to the water condition, will be determined by LKB. The location of LILCO's TS box at ORW-4 will need additional drainage system behind it to divert run off from the surrounding area. This additional work will be done in compliance with LILCO's requirements.

Recharge Basin - All work on the Injection Wells has been completed, a final report has been received from Silverite's subcontractor and is in the process of being reviewed by LKB. The deep hole borings for the Recharge Basin will start the week of March 24, 1997. A start date for the remaining work in the Recharge Basin is still pending.

Two week look-ahead

Silverite presented a two week look-ahead:

Operations Building:

Cast Filter press slab.

Complete roofing system.

Complete panels on lower building.

Continue with the installation of masonry walls.

Install concrete fill in the Dual Media tank.

Continue with the sprinkler piping installation.

Continue with the piping for the Dual Media system.

Start installation of pipe supports.

Install Exhaust Stack.

On-Site:

Set well vaults, RW-2, RW-3, W-18 & W-33.

Complete installation and backfill transmission line.

Golf course:

Start asphalt paving of the cart paths.

Continue with piping in the valve vaults / well vaults.

Continue work of the vault installations and well control building slabs.

Recharge Basin:

Start test borings, pending go-ahead from LKB.

Welsbach presented a two week-look ahead:

Operations Building:

Installation of electrical conduit systems in the masonry walls, in the low bay area. Start installation of the On-Site encased duct banks, from Building to Winding Road.

Start conduit runs to the On-Site wells, RW-3 and RW-2.

McCullagh presented a two week look-ahead:

Operation Building for Silverite:

Install On-Site piping with manholes.

Continue installing the Sprinkler piping.

Continue to install piping for the Dual Media Tanks.

Start installation of pipe supports.

Install Exhaust stack upon delivery.

Operations Building for McCullagh:

Continue plumbing rough-in for the bathroom accessories.

Continue the installation of the roof leaders.

JKB presented a two week look-ahead:

Operations Building:

Start the installation of the hot water piping.

Open discussion:

- Mr. Provenzano stated that his office will be resubmitting the Automatic Temperature Controls next week. Mr. O'Neill requested a meeting between HYDRO Group and LKB to resolve outstanding items. Mr. Hanuszek stated that he will set up a date. Mr. O'Neill indicated that he is waiting for a go-ahead from LKB to start the deep hole borings in the Recharge basin. Mr. O'Neill gave a preliminary copy of the cost proposal for the Acid Wash system, minus the piping and the I&C portion to Mr. Hanuszek. It had been agreed to brake-up the package to expedite the long lead items.
- Mr. Koziarz indicated that his office is working on securing Ingersoll Rand as suppliers for the vertical turbine pumps. McCullagh was asked if they will try to utilize the work that has already been done for the vertical turbine pumps, with the new supplier submission. Mr. Koziarz stated after they have secured a supplier they will sit down with them and see what can be done.
- Mr. Scheer expressed his concerns regarding those activities on the schedule that
 are falling behind. Mr. Scheer stated the work may become fragmented and that
 would cause Welsbach to increase their manpower in order to complete work on
 time. Mr. Hanuszek reiterated the discussions held with Silverite this week about
 resolving these issues and providing for an orderly flow of work.
- Mr. Meilink questioned Mr. Koziarz if he had submitted the valves and appurtenances. Mr. Koziarz stated that they are submitted. Mr. Meilink asked whether the motors for the Fluidized Beds have been delivered. Mr. Koziarz stated that they are on site.

Mr. Koziarz distributed to all attendees a update on the equipment delivery status.

This meeting concluded at 11:20 A.M.

The next meeting will be held on April 3, 1997 at 10:30 A.M.

CDM Camp Dresser & McKee

environmental services 100 Crossways Park West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864

February 12, 1997

Ralph Burger NYSDEC 50 Wolf Road Albany, New York 12233-7010

Subject:

Fireman's Training Center (FTC) Overhead Rate

Dear Mr. Burger:

RECEIVED

FEE 2 5 1997

Remedial Action

we paid 5% subcondractor fee for Malcolm Pione

In response to a request from Mr. George Heitzman for a comparison of the contract financial terms and conditions between CDM and the Nassau County Department of Public Works (NCDPW) on the FTC project, and the the contract between CDM and the New York State Department of Environmental Conservation (NYSDEC) on the superfund standby contract, we submit the following:

FTC CONTRACT

NYS STANDBY SUPERFUND CONTRACT

Direct Salary	at approved rate	within approved wage range
Indirect Cost	1.749 x Direct Salary Cost	1.666 x Direct Salary Cost
Fee	PF x (Direct + Indirect Costs)	PF x (Direct + Indirect Costs)
Profit Factor (PF)	0.05	0.05
Subcontractor Markup	5 % for subcontracts above \$10,000	5 % for subcontracts above \$10,000
Direct Costs*	At Cost with Restrictions	At Cost with Restrictions
Escalator for Wage Rates	None	5 % per Year

^{*}See attached

The differences are a higher overhead factor (1.749) for the FTC contract, offset by restrictions on direct costs (such as no reimbursement for telephone calls within a 5 area code area) and a significant difference in the definition of direct salary costs.

With the NYSDEC contract, actual wage rates are reimbursed, as long as they fall within the approved salary range. To my knowledge, none of the project team members had salaries in excess of their approved range. Wage ranges would have been increased by 5% per year to account for team member wage rate increases and inflation.

The FTC contract limited wage rates to an approved rate and often held the wage rate constant over the life of the contract. In some cases, the approved rate was equal to the actual rate earned by the employee. In many cases, however, the approved rate was below the actual rate (See Table 1).

70tal 2.75 Mr. Ralph Burger February 12, 1997 Page 2

TABLE 1: TEAM MEMBER HOURLY WAGE RATE COMPARISON

Employee <u>Name</u>	Actual 1995 Employee Rate	1995 Nassau Co. Approved Rate	1995 NYS Max. Approved Rate
N. Clarke	\$19.84	\$19.84	\$21.49
R. Fitzgerald	\$36.57	\$34.52	\$41.15
R. Gencorelli	\$26.98	\$25.90	\$30.80
B. Georgi	\$35.96	\$33.55	\$37.60
S. Goldstein	\$42.78	\$42.78	\$48.64
D. Keil	\$35.48	\$30.23	\$37.60
M. Maimone	\$35.73	\$35.73	\$37.60
T. McGovern	\$18.74	\$16.92	\$21.49
B. Roberts	\$26.29	\$25.72	\$29.10
K. Smith	\$24.35	\$24.35	\$29.10
D. Taggart	\$18.40	\$18.20	\$18.10
N. Vignola	\$32.98	\$22.22	\$37.60
W. Wilkens	\$38.46	\$34.10	\$48.64

Table 1 shows the approved wage rates and actual wage rates (1995) for key members of the FTC project team. Note that the wage freeze imposed on CDM had the effect of lowering the contractual indirect cost multiplier from 1.749 to below the 1.666 multiplier applied to the standby contract. $x (2.75 - 2.5) \times 0.75 \approx 30.000

Over the life of the project, CDM incurred \$424,500 in direct labor costs. If we had been allowed to use the contractual indirect labor multiplier of 1.749, total indirect and direct labor costs would have been \$1,166,800. In fact, we could only bill \$1,106,300 due to the wage rate restrictions. Thus, the actual indirect labor multiplier was only 1.606, well under the state standby contract multiplier.

In summary, although the major provisions between the two contracts are similar, the FTC contract is more restrictive, and results in a much lower actual multiplier than the 1.666 multiplier found in the NYS standby contract. The end result is a reduced invoiced amount to Nassau County, and a reduced State reimbursement. For this reason, I believe that Nassau County is entitled to full reimbursement by the State for all labor costs and indirect costs.

CDM Camp Dresser & McKee

Mr. Ralph Burger February 12, 1997 Page 3

Should you have any questions regarding the above noted matter please do not hesitate to call me.

Very truly yours,

CAMP DRESSER & McKEE

Michael Memoli

Partner

cc: M. Maimone, CDM

P. Witkowski, NCDPW

G. Heitzman, NYSDEC

File

(NC19/firetc)

RECEIVED

JAN 0 7 1997

Bureau of Eastern Remedial Action



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

January 2, 1997

New York State Department of Environmental Conservation Eastern Remedial Projects Section 50 Wolf Road Albany, New York 12233-4011

Attn: Mr. George W. Heitzman, P.E.

Re: Nassau County Fireman's Training Center

(Site # 130042) Deed Restrictions

Dear Mr. Heitzman:

Please find enclosed, in fulfillment of the County's obligations for our Record of Decision, one (1) copy of the fully executed Declaration of Restrictions, along with attachments, in connection with various soil contamination areas at the Fireman's Training Center site in Old Bethpage, New York.

If you have any questions or comments, please contact me at (516) 571-6850.

Very truly yours,

Peter J. Witkowski

etas. Witamaci

Director of Hazardous Waste Services

PJW

Attachments

cc: James A. Oliva, Division Head Sanitation & Water Supply

DECLARATION OF RESTRICTIONS

The Declaration is hereby effective as of

WITNESSETH

WHEREAS, soil contamination at certain areas within the Fireman's Training Center in Bethpage consists of the chemicals listed in Attachment No. 1 at levels that potentially threaten public health, and

WHEREAS, the New York State Department of Environmental Conservation and the County of Nassau have agreed on the remediation steps to be taken in connection with said contamination which include restrictions to be recorded in the Nassau County Clerk's Office against the use of the contaminated areas at the Fireman's Training Center, as stated in the Record of Decision, dated February, 1993 attached as Attachment No. 2, and

WHEREAS, the Fireman's Training Center is identified as Section 47, Block 153, Lots 6 and 7 on the Land and Tax Map of Nassau County, and the contaminated areas to be restricted within the Fireman's Training Center are identified by the attached metes and bounds descriptions and map and are attached as Attachment No. 3.

WHEREAS, this Declaration of Restrictions shall just affect the aforesaid contaminated areas identified in Attachment No. 3.

NOW, THEREFORE, the County of Nassau for itself and its successors and assigns, covenants and declares that:

1. Unless prior written approval by the New York State
Department of Environmental Conservation and the New York

114-91

State Department of Health (or any subsequently delegated agencies) is first obtained, there shall be no construction, use or occupancy of the contaminated areas which results in the disturbance or excavation of the waste materials on site, which threatens the integrity of the asphalt cap or soil cover materials, or which results in human exposure to contaminated soils.

- 2. Unless prior written approval by the above stated agencies is obtained, there shall be no change in the use of the contaminated areas in any way that is inconsistent with its use as a fire training center. If such a new use of the contaminated areas is approved, any and all further remedial activities at the aforesaid contaminated areas deemed necessary and appropriate by the above stated agencies will be performed by the County of Nassau.
- 3. The County of Nassau, its successors and assigns will not disturb the contaminated areas in any way, except to properly maintain the integrity of the remedial measures undertaken and maintained at the areas of contamination as stated in the Record of Decision dated February, 1993 attached hereto as Attachment No. 2, which is incorporated herein and made a part hereof as if herein set forth at length.
- 4. This Declaration is and shall be deemed to be a covenant running with the land, binding the County of Nassau, its successors and assigns, and any agent, lessee or invitee of the County of Nassau in perpetuity or until such time the New York State Department of Environmental Conservation and the New York State Department of Health (or any subsequently delegated agencies) determine, in writing, that the

Declaration is no longer necessary for the protection of human health and the environment. At such time, the covenant shall be null and void and have no effect upon the land.

COUNTY OF NASSAU

Now I design se Superty Country Expenses

APPROVED:

VEEB Michael K. Gilroy, Executive Director

FORM APPROVED!

On this day of , 1996, before me personally appeared THOMAS S. GULOTTA, County Executive of the County of Nassau, the municipal corporation described herein, and who executed the foregoing instrument, to me known and known to me to be such County Executive and he being by me duly sworn, did depose and say: That he is the County Executive of Nassau County; and that he executed the same as such County Executive for the purposes therein mentioned.

NOTARY PUBLIC
STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)
On this day of least the county of Nassau, the municipal corporation described herein and who executed the foregoing instrument, to me known and known to me to be such Deputy County Executive, and he by me being duly sworn, did depose and say: That he is the Deputy County Executive of the County of Nassau and that pursuant to Section 205 of the County Government Law of Nassau County executed the same as such Deputy County Executive for the purposes therein mentioned.
STATE OF NEW YORK)
COUNTY OF NASSAU) Commission former and 30, 19 97
On this day of ,1996, before me personally came to me known, who being by me duly sworn, did depose and say: That he resides at and that he is the
of the
corporation described in and which executed the above agreement; and that he signed his name thereto by order of its Board of Directors.
NOTARY PUBLIC
STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)
On this day of 1996, before me personally came to me known and known to me to be the person described in and who executed the same.
NOTARY PUBLIC

ATTACHMENT I NASSAU COUNTY FIREMAN'S TRAINING CENTER SUMMARY OF CHEMICALS OF POTENTIAL CONCERN

	CONCENT	RATION
CHEMICAL	On-Site Soil (ug/kg)	Ground Water (ug/l)
VOLATILES		
Acatone	1 - 73	4 - 6,050
Benzene	7 - 130	1 - 1,500
Carbon Disulfide		0.4 - 4
Chlorobenzene	12	1.4 - 3.8
Chloroform		1 - 9
1,1-Dichloroethane		2 - 15
1,1-Dichloroethene		2 - 14
trans-1,2-Dichloroethene		0.9 - 1,600
Ethyl Benzene	1 - 2,500	1 - 3,000
Methylene Chloride		1 370
Methyl Ethyl Ketone		1 - 1,200
Styrene	0.9 – 3,300	
Tetrachioroethene	2 - 10	1 - 910
Toluene	1 - 7,100	1 - 12,000
1,1,1-Trichloroethane		0 8 - 220
Trichloroethene	6 – 3,000	1 920 .
Vinyl Chloride		1 - 210
Xylenes	0.7 - 28,000	0.6 - 16,000
SEMIVOLATILES		
Acenaphthene	3,908	
Anthracene	-,,,,,	0.6 - 25
Benzoic Acid		6.8 - 150
Bis (2-ethylhexyl) Phthalate	280	3 - 860
Butyl Benzyl Phthalate	34 - 130	0.4 - 36
Di-n-Butyl Phthalate	40	
3,3-Dichlorobenzidine	2,700	
Diethyl Phthalate	23	
Di-n-Octyl Phthalate	29 - 590	0.6 - 100
Fluoranthene	34 - 500	0.8 - 63
Fluorene	5,600 - 6,500	0.1 - 560
Isophorone	990 - 1,500	
Naphthalene	280 - 23,000	0.3 - 1,500
Ругеле	30 - 1,200	1 - 150
PCBs/PESTICIDES		
PCB-1254	29	
Heptachlor	1.2 - 1.3	

FILE: NCFT2-3.WK1

0726-56-3102



Department of Environmental Conservation

Division of Hazardous Waste Remediation

Nassau County Fire Training Center

Site Number 130042 Bethpage, New York

Record of Decision

February 1993

Funded Under Title 3 of the 1986 Environmental Quality Bond Act



New York State Department of Environmental Conservation
MARIO M. CUOMO, Governor THOMAS C. JORLING, Commissioner

DECLARATION OF THE RECORD OF DECISION

SITE NAME AND LOCATION

Nassau County Fire Training Center Town of Oyster Bay Nassau County, New York Site Code: 130042

Funding Source: 1986 Environmental Quality Bond Act

STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for the Nassau County Fire Training Center inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law (ECL) and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC Section 9601, et., sec., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Exhibit A identifies the documents that comprise the Arministrative Record for the site and includes the final Remedial Investigation and Feasibility Study (RI/FS) reports. The documents in the Arministrative Record are the basis for the selected remedial action.

ASSESSMENT OF THE SITE

Actual or threatened release of hazardous waste constituents from this site, if not addressed by implementing the response action selected in this Record of Decision (ROD), may present a current or potential threat to public health and the environment.

SUMMARY OF REMEDY SELECTION

Based upon the results of the RI/FS for the Nassau County Fire Training Center and the criteria for selecting a remedy, the New York State Department of Environmental Conservation (NYSDEC) has selected a remedy consisting of an asphalt/concrete cap with institutional controls for shallow soils, bioventing of deep soils, pumping and treating on-site groundwater using three extraction wells, and pumping and treating off-site groundwater using twelve extraction wells.

The existing asphalt and concrete pavement will be extended over all areas of shallow soil contamination to prevent casual contact with contaminants. Deed restrictions will control future uses of the property, and will ensure notification of and approval by NYSDEC and NYSDOH if excavation into contaminated areas occurs. Bioventing, an innovative technology, will be attempted as a permanent remedy for both volatile and semivolatile contaminants found in deep soils. If bioventing is unsuccessful, vacuum extraction of volatile contaminants is retained as a contingent remedy. On-site and off-site groundwater will be extracted, treated on-site, and recharged to groundwater in compliance with discharge standards. If a recharge basin cannot be accessed to accept the flow from off-site extraction wells, a contingent remedy involving extraction from

seven wells, treatment, and discharge to reinjection wells will be implemented. A long-term groundwater monitoring program will be implemented to evaluate the performance of the remedial action, and to protect nearby public water supplies.

DECLARATION

The selected remedy is protective of human health and the environment, complies with State and Federal Standards, Criteria and Guidance (SCGs) that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. Waivers are justified for SCGs that will not be met. This remedy utilizes permanent solutions and innovative technologies to the maximum extent practicable, and satisfies the statutory preference for treatment as a principal element.

Because contaminated soils will remain on site in an untreated state, a review will be conducted no later than five years after completion of construction of the remedial action, and every five years thereafter, to ensure that the remedy continues to provide adequate protection of human health and the environment.

Date 1993

Ann Hill DeBarbieri

Deputy Commissioner

Office of Environmental Remediation

New York State Department of

Environmental Conservation

SECTION	47	BLOCK	B P/O LO	OT6
LIBER		PAGE	_DATE_	
		COUNTY OF NASSAU		
		PARCEL NO.		

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 185.98 feet to a point; Running thence and through Lot 6 South 15 Degrees 42 Minutes 05 Seconds West, 152.46 feet to the true point or place of beginning; Running thence along the easterly line of the parcel herein described, South 19 Degrees 18 Minutes 48 Seconds West, 34.18 feet to its point of intersection with the southerly line of the parcel herein described; Running thence along the southerly line of the parcel herein described North 83 Degrees 57 Minutes 47 Seconds West, 29.41 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 21 Degrees 43 Minutes 55 Seconds East, 33.17 feet to its point of intersection with the northerly line of the parcel herein described; Running thence along the northerly line of the parcel herein described South 86 Degrees 39 Minutes 44 Seconds East, 28.31 feet to the true point or place of beginning and containing 935 plus or minus square feet.

FIREMAN'S TRAINING CENTERS

SECTION	47	BLOCK	B P/O LOT	6
LIBER		PAGE	DATE	
		COUNTY OF NASSAU		
		PARCEL NO		

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 511.06 feet to a point; Running thence and through Lot 6 South 15 Degrees 42 Minutes 05 Seconds West, 143.03 feet to the true point or place of beginning; Running thence along the northerly line of the parcel herein described, South 72 Degrees 27 Minutes 39 Seconds East, 35.69 feet to its point of intersection with the easterly line of the parcel herein described; Running thence along the easterly line of the parcel herein described South 16 Degrees 40 Minutes 13 Seconds West, 68.49 feet to its point of intersection with the southerly line of the parcel herein described; Running thence along the southerly line of the parcel herein described North 66 Degrees 46 Minutes 52 Seconds West, 36.82 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 17 Degrees 27 Minutes 45 Seconds East, 64.83 feet to the true point or place of beginning and containing 2,410 plus or minus square feet.

FIREMAN'S TRAINING CENTER, OLD BETHPAGE

SECTION	47	BLOCK	B P/O LOT	6
LIBER		PAGE	DATE	
		COUNTY OF NASSAU		
		PARCEL NO		

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 576.35 feet to a point; Running thence and through Lot 6 South 15 Degrees 42 Minutes 05 Seconds West, 251.58 feet to the true point or place of beginning; Running thence along the northerly line of the parcel herein described, South 68 Degrees 59 Minutes 27 Seconds East, 55.84 feet to its point of intersection with the easterly line of the parcel herein described; Running thence along the easterly line of the parcel herein described South 21 Degrees 32 Minutes 43 Seconds West, 83.11 feet to its point of intersection with the southerly line of the parcel herein described; Running thence along the southerly line of the parcel herein described North 67 Degrees 50 Minutes 01 Seconds West, 47.30 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 15 Degrees 36 Minutes 24 Seconds East, 82.52 feet to the true point or place of beginning and containing 4,259 plus or minus square feet.

SECTION	47	BLOCK	B P/O LOTS	6 & 7
LIBER		PAGE	DATE	
		COUNTY OF NASSAU		
		PARCEI, NO		

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 324.53 feet to a point; Running thence and through Lot 6 South 15 Degrees 42 Minutes 05 Seconds West, 103.44 feet to the true point or place of beginning; Running thence along the southerly line of the parcel herein described, North 74 Degrees 57 Minutes 37 Seconds West, 300.28 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 15 Degrees 15 Minutes 52 Seconds East, 124.71 feet to its point of intersection with the northerly line of the parcel herein described; Running thence along the northerly line of the parcel herein described South 73 Degrees 57 Minutes 31 Seconds East, 309.65 feet to its point of intersection with the easterly line of the parcel herein described; Running thence along the easterly line of the parcel herein described South 19 Degrees 44 Minutes 26 Seconds West, 119.70 feet to the true point or place of beginning and containing 37,217 plus or minus square feet.

FIREMAN'S TRAINING CENTER, OLD BETHPAGE

SECTION	47	BLOCK	B P/O LOT_	7
LIBER	••	PAGE	DATE	
LAST OWNER	OF RECORD	COUNTY OF NASSAU		
ADDRESS OF	OWNER			
		PARCEL NO.	5	

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 483.37 feet to a point; Running thence and through Lot 7 North 15 Degrees 42 Minutes 05 Seconds East, 76.49 feet to the true point or place of beginning; Running thence along the southerly line of the parcel herein described, North 74 Degrees 44 Minutes 44 Seconds West, 82.41 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 15 Degrees 50 Minutes 48 Seconds East, 88.44 feet to its point of intersection with the northerly line of the parcel herein described; Running thence along the northerly line of the parcel herein described South 74 Degrees 17 Minutes 55 Seconds East, 84.22 feet to its point of intersection with the easterly line of the parcel herein described; Running thence along the easterly line of the parcel herein described South 17 Degrees 01 Minutes 50 Seconds West, 87.82 feet to the true point or place of beginning and containing 7,341 plus or minus square feet.

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE TO EXECUTE A DECLARATION OF RESTRICTIONS REGARDING COUNTY OWNED PROPERTY BEING LOCATED AT THE FIREMAN'S TRAINING CENTER, OLD BETHPAGE, TOWN OF OYSTER BAY, IN ORDER THAT ONLY CERTAIN AND SPECIFIED CONTAMINATED LOCATIONS WITHIN THE SAID PROPERTY WILL BE COVERED BY THE DECLARATION OF RESTRICTIONS AND THE REMAINING PROPERTY CAN BE USED PRODUCTIVELY.

Executive Director Deputy County

WHEREAS, THE COUNTY OF NASSAU, hereinafter referred to as the County, is the owner of property known as the Fireman's Training Center, Old Bethpage, Town of Oyster Bay which is identified as Section 47, Block 153, Lots 6 and 7 on the Land and Tax Map of Nassau County; and

WHEREAS, there are certain areas within said property that contain chemicals at levels that potentially threaten public health; and

STATE OF NEW YORK COUNTY OF NASSAU

SS.:

No. 37897

the

I, JOHN P. COLBERT, Clerk of the Board, Nassau County Legislature, do hereby certify that the	, t
foregoing is a true and correct copy of the original <u>flsolntion</u> No. 617-1996 duly	tent
passed by the Nassau County Legislature, New York, on December 16, 1996	ten
and approved by the County Executive on December 18, 1996 and on file in my	VEII
office and recorded in the record of the proceedings of the Nassau County Legislature is the whole of said	1
original.	

JOHN P. COLBERT Clerk of the Legislature Nassau County Legislature

FORM 86-100B 2/96

FORM APPROVED ALLOTHEY

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE TO EXECUTE A DECLARATION OF RESTRICTIONS REGARDING COUNTY OWNED PROPERTY BEING LOCATED AT THE FIREMAN'S TRAINING CENTER, OLD BETHPAGE, TOWN OF DYSTER BAY, IN ORDER THAT ONLY CERTAIN AND SPECIFIED CONTAMINATED LOCATIONS WITHIN THE SAID PROPERTY WILL BE COVERED BY THE DECLARATION OF RESTRICTIONS AND THE REMAINING PROPERTY CAN BE USED PRODUCTIVELY.

WHEREAS, THE COUNTY OF NASSAU, hereinafter referred to as the County, is the owner of property known as the Fireman's Training Center, Old Bethpage, Town of Oyster Bay which is identified as Section 47, Block 153, Lots 6 and 7 on the Land and Tax Map of Nassau County; and

WHEREAS, there are certain areas within said property that contain chemicals at levels that potentially threaten public health; and

WHEREAS, the New York State Department of
Environmental Conservation and the County have agreed on the
remediation steps to be taken in connection with the said
contaminated areas within the above stated property; and

WHEREAS; there shall be no change in the present use of the contaminated areas in any way that is inconsistent with its use as a fire training center, unless prior written approval of the New York State Department of Environmental Conservation and the New York State Department of Health is obtained; and

Passed by Nassau County Legislature on DEC 1 6 1996. A voice vote as taken with 19 Legislators present.

Voting: aye 19; nay 2, abstained 2.

Became a resolution on DEC 1 8 1996 with the approval of the County Executive.

EB Michael K. Cilray, Executive Direct

WHEREAS, the Declaration of Restrictions will refer

only to the areas contaminated by chemicals and the remaining areas will be free from said restrictions.

therefore avoiding the loss of other uses for the remaining therefore at the Fireman's Training Center; now therefore be it

RESOLVED, that the COUNTY EXECUTIVE be, and he hereby is authorized to execute, on behalf of the COUNTY OF Certain County owned property located at the Fireman's Training Center in Old Bethpage in order that the use of only and identified in the said Declaration of Restrictions, be and identified in the said Declaration of Restrictions, be and identified in the said Declaration of Restrictions, be centrain and specified contaminated locations, as referred to and identified in the said Declaration of Restrictions, be centrain and specified contaminated locations and the restricted by the declaration of restrictions and the restricted by the declaration of restrictions and the productively; and be it further

RESOLVED that the COUNTY ATTORNEY of Nassau County the Office of the Clerk of the County of Nassau; and be it the Office of the Clerk of the County of Nassau; and be it further

RESOLUTION and be it further RECUTIVE or the COUNTY EXECUTIVE OR THE COUNTY EX

RESOLVED that this Resolution shall take effect

DEC 1 8 1996

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Attachment

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010



Michael D. Zagata Commissioner

December 12, 1996

Mr. Walter Hennenberger Nassau County Department of Public Works Mineola, NY 11501-4822

Re: Nassau County Fire Training Center, Site # 1-30-042, Contract # C300052

Payment Request #6A

Dear Mr. Hennenberger:

The New York State Department of Environmental Conservation has reviewed the most recent payment request (#6A) submitted by Nassau County, and is returning the voucher and summary sheets for revision and resubmittal. The two sets of copies of the CDM vouchers will be kept on file for review with the resubmitted request.

The DEC is returning the County's request because documentation is missing, primarily concerning contracts and subcontracts, which is necessary to process the request.

General (all vouchers)

Camp, Dresser & Mckee (CDM) does not have an approved indirect multiplier for EQBA reimbursement for this project. The attached correspondence (attachment #1, February 13, 1994 letter from Heitzman to Witkowski) indicated that the terms of CDM's contract with Nassau County were different than their standby contract with DEC, and so the DEC indirect cost rate could not apply. More recent correspondence (attachment #2, April 1, 1996 letter from Lupe to Velsor) advised CDM that they were not approved for a 2.8 multiplier on several EQBA Title 3 projects, and requested additional documentation. To date, none has been received.

The DEC could, without additional documentation, reimburse Nassau County at a 2.5 overall multiplier for the work performed by CDM. However, the DEC would prefer to review the County's request after a multiplier is approved to avoid the need for a resubmittal to cover the difference. A higher multiplier could be justified by completion of the cost rate schedules included in attachment 1, or by an analysis of the differences between the terms of CDM's contracts with the County and the State. In the latter case, the State contract indirect rate would be applied, but the items not funded in the State contract would be disallowed from the County's payment request.

Similarly, an indirect rate has not been established for Envirogen. The County could be reimbursed at a 2.5 multiplier without additional documentation. Because DEC does not have a standby contract with Envirogen, the only mechanism to justify a higher rate is to have Envirogen complete the forms in attachment #1.

In reviewing the County's analysis of allowable labor rates, it appears that some CDM employes were incorrectly assigned to corresponding NYS titles, to the disadvantage of the County. Mr. Memoli should be assigned to the Owner/Officer title, with a 1994 hourly rate of \$48/hr. Mr. Maimone and Mr. Marlowe should be assigned to the Associate Engineer title, with a 1994 hourly rate of \$38/hr. Mr. Keil should be assigned to the Senior Geologist title, with a 1994 hourly rate of \$30/hr. These changes to the spreadsheet would result in added reimbursement for the County.

Several subcontracts have not been provided to DEC; copies of these are necessary to make associated payments to the County. These are contracts between CDM and Melick-Tully, Massand, and Reprographics.

Voucher # G06464

In the County's summary table entitled "Calculation of Allowable Labor Cost", the CDM subtask #48DN-Bioventing was omitted. This was included in CDM's claim voucher, with a burdened labor cost of \$6,933.26. Note that this task was included on the County's summary of Non-Labor costs.

Voucher # G06465

Under CDM subtask 50DN-Groundwater Treatment, the County's spreadsheet contains the value of 14 hours for all staff. The actual hours vary considerably, resulting in a total of 2095 hours, compared to the 420 hours on the County's request (see attachment #3). This should be revised.

Voucher # G06473

Under task 50DN, the number of hours billed for C. Walsh is 439.5. This is excessive for a one-month billing period. If this represents a billing backlog, some explanation should be provided and time sheets should be included to justify this claim. Otherwise the spreadsheet should be revised.

Voucher #G06481

This voucher covers work performed by Envirogen under subcontract to CDM.

As discussed above, DEC can only reimburse Envirogen's costs at a 2.5 multiplier until additional documentation is received. In addition, the following documentation is missing from the 5 Envirogen invoices included in this voucher:

Period Ending December 31, 1993

Direct Non-Salary Costs:

Under Tasks 1.1 and 1.2,costs of \$2,750 and \$3,600 are included for Analytical Testing, but no invoices are included for this work.

Subcontractor

For the work performed by Delta Well & Pump totalling \$10,180, a copy of the bid documentation and subcontract is required. If this work was performed pursuant to the unit prices in the County's standby drilling contract, such documentation should be provided.

Period Ending February 23, 1994

The labor summaries which are included in this invoice pertain to December 1993. The correct labor summary should be provided.

Period Ending April 1, 1994

Direct labor summaries are missing from this invoice.

Period Ending April 29, 1994

For the work performed by Tabasco Drilling Corp, totalling \$9,970.10, a copy of the bid documentation and subcontract is required. If this work was performed pursuant to the unit prices in the County's standby drilling contract, such documentation should be provided.

Voucher # G 06492

Under task 50DN, the number of hours billed for W. Lewis is 441.5 for this two-month billing period, which seems excessive. Time sheets should be provided to justify this claim.

Voucher # G31388

This voucher, which included \$40.12 of Miscellaneous Expense and \$4,017.93 of Subcontracted Expense, was omitted from the County's spreadsheet of Non-Labor Costs.

If you have any questions about these items, please call me at (518) 457-3395. I am also available to meet and discuss these in more detail, if necessary.

Sincerely,

George WHeitzman, P.F.

Senior Environmental Engineer

Division of Environmental Remediation

cc: P. Witkowski

New York State Department of Environmental Conservation Division of Environmental Remediation 50 Wolf Road, Albany, New York 12233-7010



FACSIMILE TRANSMITTAL

To: <u>Peter Witkowski, NCDPW</u>

From: George Heitzman, NYS Department of Environmental Conservation

Date: December 6, 1996

Number of Pages: <u>0</u> + cover

In reviewing the County's Payment Request, I find that I am missing copies of subcontracts between CDM and:

Melick-Tully Massand

I do have a copy of the bids issued by Massand for drilling services.

Please forward these to me at your earliest convenience.

New York State Department of Environmental Conservation

MEMORANDUM

Brenda Moulhem, Supervisor of Minority & Women's Business Enterprise Kelly Bologna, Supervisor, Thru: Ralph E. Burger, Principal Accountant, DER Release of Seventh Payment

R. Berryer

DATE:

November 1, 1996

This is to verify the telephone conversation of November 1, 1996 giving approval for the release of the seventh payment on the following project:

C300052

Nassau Co. Fireman's Training Center

Site No. 1-30-042

We understand that the utilization plan has not been approved. Therefore, we will contact you at a later date regarding the release of future payments.

If you need additional information or have any questions, please contact Joan Snyder, of my staff, at 5-8403.

cc:

G. Heitzman

V. Alfonso

a:nassau.#17 Ralph Disk #11

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010



August 8, 1996

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit 170 Cantiague Rock Road - Trailer Complex Hicksville, NY 11801

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center (Site #130042)

This is in response to Nassau County's February 16, 1996 letter to Ralph Burger regarding resubmittal of disallowed costs from Payment #5. Upon review of the documentation transmitted, the following resubmitted costs will be eligible for EQBA Title 3 reimbursement:

Voucher #G01478 - Other Direct Costs - \$ 9,994.50 Clean Venture soil disposal costs - \$16, 915 Force Account charges - \$ 166,579

, 0.75 : 145,116.38

To claim these resubmitted costs totalling \$193,488.50, Nassau County should submit a New York State Standard Voucher and Municipality Application for Payment form to my attention. I will keep the supporting documentation until the payment application is received.

Please call me at (518) 457-3395 if you have any further questions or concerns.

Sincerely,

George W. Heitzman, P.E. Senior Environmental Engineer Division of Hazardous Waste

Remediation

MUNICIPALITY'S APPLICATION FOR PAYMENT (TITLE 3 STATE ASSISTANCE CONTRACT)

SCHEDULE III I certify that I have checked this applic statement of work performed and/or materials supplied in accordance with the contract requirement (Date) SCHEDULE IV EXAMINED AND APPROVED BY RESPONSIBLE DIVISION DATE SIGNATURE	(Signature) ENDORSED BY DEPARTMENT OF ENVIRONMENTAL CO	nowledge and belief it is a true and correction is a true and correct which has been performed and/or materials
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I certify that I have checked this applic statement of work performed and/or materials	cation for payment; that to the best of my kr supplied by the contractor, and that the wor	owledge and belief it is a true and corre
	CERTIFICATION BY ENGINEER / PRO	DJECT MANAGER
(Date)		
	(Signature)	
I (Name) the Municipality herein referenced. According payment are correct, all work has been perfor contract account up to and including the last	do hereby certify that I am (Tit g to my knowledge and belief all items and an rmed and/or materials supplied, the foregoing t day of the period covered by this applicati	of the points shown on the face of this application is a true and correct statement of the con.
SCHEDULE II	CERTIFICATION BY MUNICIPALITY	
CONTRACT VALUE (Values indicate 75) Line 1. Original Contract 2. Amendments \$ 3. Net Contract Amount \$ 4. Haximum Retainage \$ (5% of line 3)	Line 1. Work performed in previous a 2. Work performed this applicat 3. Work performed to date 4. Retainage 5. Work performed to date less 6. Less previous payments 7. Payment this application	applications \$
SCHEDULE 1	FINANCIAL STATEMENT	
With Final Payments Attach Labor Affidavits		ate Labor Law Section 220A
	Employee ID No.	
	Work Period Ending	
	Application No.	Date App. Rec'd
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PAYEE (Name & Address)	Comptroller Contract No.	FOR AGENCY USE ONLY Orig. Agency Code

MUNICIPALITY'S APPLICATION FOR PAYMENT (TITLE 3 STATE ASSISTANCE CONTRACT)

CREDULE 1: CARRIAGO AND APPROVED BY RESPONSIBLE O	ENDORSED BY DEPARTMENT OF ENVIRONMENTAL OR DIVISION OF BUREAL PAYER OF BUREAL DATE	
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	Work Period Ending	
	Application No	Date App. Rec'd

MUNICIPALITY'S APPLICATION FOR PAYMENT (TITLE 3 STATE ASSISTANCE CONTRACT)

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KATHLEEN A. GAFFNEY, M.D., M.P.H.

COMMISSIONER

THOMAS S. GULOTTA COUNTY EXECUTIVE



COUNTY OF NASSAU DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD MINEOUA, N.Y. 11501-4250

June 27, 1996

SYNON OF LANGE AND THE WASTERN OF THE MORKS

Mr. Paul M. Roth, P.E., Commissioner Department of Public Works Town of North Hempstead 285 Denton Avenue New Hyde Park, New York 11040

Re: Port Washington L-4
Ground Water/Irrigation Project

Dear Mr. Roth:

The Department has reviewed your recent correspondence regarding the Town of North Hempstead's proposal to utilize L-4's ground water remediation system effluent to irrigate a proposed golf course on the adjacent Morewood property.

Based upon the limited preliminary information available (from communication with yourself and the DEC), the project seems feasible.

From a public health standpoint, we suggest that the use of a subsurface "soaker" irrigation system be investigated, this would minimize the public's primary contact with any aerosols or wetted turf from a spray-type application. In addition, this system would permit irrigation while the golf course is in use and cut down on evaporative losses.

The Department looks forward to reviewing your proposed design plan.

Sincerely

Bruce B. Smith, P.E.

Director

Division of Environmental Health

BBS:BFM:jp

7488J-16

New York State Department of Environmental Conservation Building 40 - SUNY, Stony Brook, New York 11790-2356 Phone (516) 444-0405 Fax # (516) 444-0373



Michael D. Zagata Commissioner

June 14, 1996

TO

Paul M. Roth, P.E.
Commissioner, Department Of Public Works
Town of North Hempstead
285 Denton Avenue
New Hyde Park, NY 11040

Re: Port Washington Landfill Remediation/Morewood Property Golf Course

Thank you for your recent inquiry concerning the Town's intention to pursue the re-use of treated discharge from its L-4 landfill groundwater remediation system as a major source of irrigation water for a proposed, adjacent municipal golf course.

On its face, it appears that this innovative proposal will address several environmental problems. As I understand it, not only does your proposal provide a beneficial re-use for treated groundwater from the landfill, but in addition, avoids the need to utilize, and thus conserves, the peninsula's fragile public water supply aquifer. Furthermore, our Albany Office of Division of Hazardous Waste Remediation indicates that pumping and re-injection rates, and well locations, can be designed so as to protect public supply wells, avoid any impact on the salt water interface, and perhaps reverse some affects of salt water intrusion caused by a historical sandmining operation at the site.

From a regulatory standpoint, the use of water from the landfill remediation treated to remove the volatile organic contaminants for spray irrigation of the golf course causes none of the concerns about airborne pathogens that had been raised by an alternative proposal to use treated sanitary sewage for the same purpose. The withdrawal and treatment of the water could be regulated under the consent order for the landfill remediation, and thus, the re-use of the water for irrigation may not require any permits from this Department.

We look forward to seeing this innovative proposal come to fruition. If I can be of any assistance please contact me.

William H. Spitz

Chief, Water Supply Office

WHS:ic

cc:

R. E. Cowen R. W. Schneck Gerard Burke



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

1996 JUL -8 P 12: 55

July 3, 1996

Paul Roth, Commissioner Solid Waste Management Authority Town of North Hempstead 802 West Shore Road Port Washington, NY 11050

Dear Mr. Roth:

I am writing in response to your letter to me dated May 14, 1996 regarding possible regulatory issues regarding the use of treated contaminated groundwater for use as irrigation for a planned golf course adjacent to the L-4 landfill. The Superfund program considers water treated to applicable standards to be a "resource", usable for purposes appropriate to the level of residual contamination remaining in the water. The RCRA program may have different protocols which you may wish to explore.

Sincerely,

Kevin Willis

Remedial Project Manager

C, a MICREE

CAMP, DRESSER & McKEE EMPLOYEE LIST - Contract DOO2925

NSPE LEVEL	NAME	TITLE	EFFECTIVE DATE
9	HOWARD, W.	ENEV0	03/26/92
9	MEMOLI, Michael	ENEVO	03/26/92
9	Olsen, Roger L.	ENEV9	04/17/96
9	PEDERSEN, Tom	SCEV9	05/01/95
9	TORTORA, L.	ENEV0	03/26/92
			00/20/02
8	GOLDSTEIN, S.	ENEV7	03/26/92
8	Seeler, Tim A	ENEV9	04/17/96
8	WEINSTEIN, B.	ENCH8	10/04/94
	BENNETT, Drew B.	SCEV7	12/15/95
7	GUTERMAN, Lee	SCEV7	03/26/92
7	KNOWLES, G. David MAIMONE, Mark	ENEV7	10/04/94
$-\frac{7}{7}$	MARLOWE, C.	ENVE7 SCEV7	12/15/95 03/26/92
7	MOLONGOWSKI, Richard	ENEV7	10/04/94
7	PARR. J.	ENEV7	03/26/92
7	PELLE, R.	SCEV7	03/26/92
7	RANNEY, C.	SCEV7	03/26/92
	10 111121, 0.	00211	00/20/02
6	CATTAFE, J.	SCEV6	03/26/92
6	DAHLGREN, P.	SCEV6	01/31/94
6	HEELEY, Richard W.	SCEV6	03/24/95
6	KEIL, D.	SCEV6	03/26/92
6	KULLMAN, Randolph	SCEV6	12/15/95
6	MILLER, James	ENCH6	03/26/92
6	OSBORNE, P.	TECE7	04/02/95
6	REED, W.	SCEV5	01/31/94
6	Rooney, John E.	ENEV6	04/17/96
6	SANKARMANCHI, N.	ENEV6	08/28/94
6	VIGNOLA, N.	SCEV6	10/20/93
0	Von Schondorf, Peter L.	SCEV6	04/17/96
5	BEST, B.	ENEV5	01/31/94
5	BUCHANAN, L.	SCEV5	04/30/95
5	CHENENKO, Ricky A.	SCEV5	12/15/95
5	DESIKAN, V.	SCEV5	03/26/92
5	DOWNIE, A.	ENEV5	03/26/92
5	FORGANG, P.	ENCH5	03/26/92
5	FOX, Thomas	SCEV5	01/29/95
5	GENCORELLI, R.	DNDF6	03/26/92
5	KIRCHNER, S.	SCEV5	01/31/94
5	MARABELLO, David A.	ENCH5	12/15/95
5	MARTINOVICH, Betty	ENEV5	03/06/95
5	MURPHY, Sue PENNINGTON, R.	ENEV5	10/02/94
<u>5</u> 5	SMITH, Kenneth	ENEV5 ENCH5	10/04/94 10/02/94
5	STANTON, B.	ENEV5	10/02/94
5	TYSON, K.	SCEV5	01/31/94
4	ALVAREZ, K.	ENEV4	01/31/94
4	BLAUM, John	ENEV4	04/02/94
4	CLARKE, Noelle M.	ENEV4	12/15/95
4	FARRELLY, Brian	ENEV4	12/15/95
4	GLOVER, D.	ENEV4	08/25/85
4 4	GRANADOS, L.	SCEV4	10/20/93
4	KASLICK, C. KEOUGH, W.	ENCH4	07/03/94 10/30/94
4	LAUSTEN Thomas	ENEV4 ENEV4	07/31/94
4	McCONNELL, William C.	ENEV4	12/15/95
4	McLEAN-HORNSBY, Jeanette	SCEV4	12/15/95
4	MOLLOY, Kevin P	SCEV4	05/01/95
4	MULLIGAN, Kevin C.	ENEV4	12/15/95
4	POPPER, M.	ENEV4	03/26/92
4	REVINSKI, A.	DNDF5	03/26/92
4	SELLERS, K.	ENEV4	08/28/94
2	POVA HAND	TAIT VO	07/20/05
3	BOYAJIAN, P	ENEV3	07/30/95
3	CAPUZZI, A. EHNOT, M	SCEV3	10/04/94 01/31/94
3	FORD, Michael	ENEV3	07/10/94
	TONO, MICHAEL	LIAT A 2	07710734

3	HORN, T.	TEGN6	01/31/94
3	KELLY, Lawrence	ENEV3	04/02/95
3	LEE, H.	DNDF4	03/26/92
3 3	LEROUX, Michael	TEGN6	04/17/96
3	LYNCH, R. Marran, Kenneth S.	DNDF6 ENEV3	03/26/92 04/17/96
3	McGOVERN, Thomas	ENEV3	07/03/94
3	McMULLEN, Jay F.	TEGN6	12/15/95
3	OLIVER, W.	DNDF4	03/26/92
3	POTORTI, Donna L.	ENEV3	12/15/95
3	PUTSCHER	ENVE3	10/04/94
3 3	RAMASWANY, Buvana RINEHART, R.	SCEV3 SCEV3	12/15/95 07/04/93
3	ROBINSON. F.	SCEV3	10/04/94
3	TRULLI, S.	DNDF4	09/27/92
	DOID 0	EUEVO	0.447.05
2 2	BOLD, G. BOYER, John	ENEV2 ENEV2	04/17/95 03/24/95
2	Capuzzi, W.	SCEV2	10/04/94
2	CATA, E.	DNDF2	12/29/91
2	CRANE, C.	ENEV2	06/12/95
2	DUMONT, D.	TEGN3	05/28/95
2	GROVE, L.	TEGN3	01/31/94
2 2	Haller, Christine M. HAUSER, D.	CNRP6 DNDF2	04/17/96 10/04/94
2	HENDERSON, Elizabeth	ENEV2	03/24/95
2	Jamgocian, R.	ENEV2	05/28/95
2	Johnston, George (Trey)	ENEV2	04/17/96
2	KALNY, C.	DRDF2	03/26/92
2 2	KUBISKA, Miriam	ENEV2	03/24/95 12/15/95
2	LARSEN, Andrea L. MURTAGH, B.	SCEV2 SCEV2	06/19/95
2	OGEN, E.	ENEV2	10/10/91
2	Rigopulos, Christopher	MGGN2	11/27/94
2	WALSH, C.	ENEV2	10/04/94
2	WHALEN, J.	ENEV2	05/28/95
	Calahan, Susan M.	TEGN1	12/15/95
1	EUGENE, V.	TECH2	01/31/94
1	Hung, Eric L.	COOP1	03/24/95
1	Mangini, Jeffrey M.	TEGN1	12/15/95
	MARRIOTT, B. Perkins, Norman	TECH1 COOP1	10/20/93 04/17/96
1	Raschke, Matthew A.	ENEV1	05/01/95
<u> </u>	RATHMAN, C	TEGN2	10/04/94
1	ROCHE, M.	TEGN1	06/19/95
1	SCHRAM, T	SCEV1	10/04/94
1	WEST, J.	COOP1	01/16/95
	WILKERSON, F.	TEGN1	05/28/95
ADMIN	CARROLL, V	ASLY8	01/31/94
ADMIN	COHEN, N.	ASAD2	06/19/95
ADMIN	Corey, Patricia	ASAD2	03/24/95
ADMIN	HILL, E.	TYWP3	03/26/92 03/26/92
ADMIN ADMIN	HOYDA, C. HUGHES-MENDONCA, S.	SEGN3 ASOS3	03/26/92
ADMIN	LEMONGELLI, F.	SEGN3	03/26/92
ADMIN	LIBURD, J.	ASOS5	10/04/94
ADMIN	LUTHER, T.	AAGN3	01/29/92
ADMIN ADMIN	MANCINI, L. MANNELLI, J.	ASWP5 ASAD2	03/26/92 05/01/95
ADMIN	MARSHALL, C.	FNCA6	10/20/93
ADMIN	McIver, Francis	ASAD3	04/17/96
ADMIN	McKINNEY, W.	ASAD3	10/02/94
ADMIN	MUSANTRY, L.	FNCA8	03/26/92
ADMIN	NOVER, P.	ASAD3	01/23/95 03/26/92
ADMIN ADMIN	ORTELIO, K. REVINSKI, J.	AAGN5 FNAS2	08/07/89
ADMIN	SHNEER, J.	CLOF3	03/26/92
ADMIN	SOMMERVILLE, G.	ASAD3	08/01/95
ADMIN	SPERANZA S	ASAD4	01/03/95
ADMIN ADMIN	TAGGART, D. WYNNE, M	ASAD4 ASAD3	03/26/92 10/20/93
ADMIN	YUHAS Dawn	CLOF3	04/27/95

Attachment #2

New York State Department of Environmental Conservation

Division of Hazardous Waste Remediation 50 Wolf Road, Albany, New York 12233-7010

April 1, 1996

AΡ



Michael D. Zagata Commissioner

Mr. Curtis F. Velsor, Jr. Senior Associate Camp, Dresser & McKee 100 Crossways Park West Woodbury, New York 11797

Re: Title 3 Projects

Dear Mr. Velsor:

In response to your March 11, 1996 letter, I would like to clarify a few issues about your understanding of how CDM's approved standby multiplier may be applied to Title 3 work. There are basically two ways of obtaining an approved multiplier for a Title 3 project:

- If a standby consultant already has an approved multiplier under a SSF standby contract, that multiplier may be used for Title 3 work provided that the terms and conditions of the Title 3 contract are essentially the same as those found in the SSF standby contract. This includes not only the indirect cost rate and fees, but also other cost items such as labor, direct costs, etc.
- 2. If option one is not feasible, the consultant must submit financial information including:
 - recent set of financial statements;
 - Title 3 Forms Nos. 5 and 6; and
 - a reconciliation of Form #5 to the financial statements.

For either option, there are certain protocols which should be followed. The Consultant should submit their contract to the DEC Project Manager for a Title 3 eligibility determination. Once eligibility is determined, the consultant should then submit their multiplier information to the DEC Project Manager who will forward it to our Cost Analysis & Payment Section for review. The Contract Development Section has little direct involvement and should not be used as the point of contact for Title 3 work.

I have been informed by the Cost Analysis & Payments Section that contracts for the three projects mentioned in your letter have already been reviewed. Listed below are the results of those reviews:

- Cortese Landfill approved for 2.8 multiplier (166% indirect and 5% fixed fee)
- Brookfield Avenue Landfill RIFS contracts determined not similar (differences in

- salary rates, interim payment overhead rate and other direct costs)
- Nassau County Fireman's Training Center Design contracts determined not similar (differences in overhead rates and direct costs)

In a separate 2/22/96 letter to Gerard Burke, you supplied various multiplier information for the Cortese site. A multiplier has already been approved for that project so no additional information is needed for this site. If the remaining two contracts (Brookfield and Nassau) can be amended to make the cost terms similar to the Cortese contract, the same multiplier could be approved for these contracts. Otherwise, the financial items listed under Option 2 above are required. The submittal included in the 2/22/96 letter is not acceptable, since it is based on '96 projections and is missing the financial statements and reconciliation.

We have received copies of your March 25, 1996 letters (attached) to several municipalities indicating the DEC has approved CDM's multiplier of 2.8 for Title 3 contracts. This is a mischaracteristic regarding our recent discussions with Mr. Memoli. As indicated during those discussions and above, other fiscal terms of the contracts (direct salary rates, direct costs, etc.) must also be the same to receive the 2.8 multiplier. Please review your Brookfield Landfill and Nassau Fire Training Center contracts relative to comments forwarded from the DEC Project Managers and as listed above. Revised contracts to address these comments should be forwarded through the DEC Project Managers.

On a separate item involving renegotiation of CDM's overhead rate, I'd like to point out that the request to renegotiate CDM's standby contract should come directly from Mike Memoli, since he is the named contact person in that contract. If CDM wishes to renegotiate its contract, I'd like to suggest sometime in July as a good time to make that request, since we are currently negotiating other contracts.

I hope this letter clarifies the establishment of Title 3 multipliers. If you have any additional questions, please contact the DEC Project Managers directly for assistance.

Sincerely,

December 18 funcion

Raymond E. Lupe, P.E.

Chief

Contract Development Section Division of Hazardous Remediation

Attachment
cc: Mike Memoli (CDM)
Ralph Burger
Bob Cozzy
Gerard Burke
George Heitzman
Joe O'Connell

environmental services 100 Crossways Park West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864

March 25, 1996

Mr. Peter Witkowski Nassau County Department of Public Works 170 Cantiague Rock Road Hicksville, NY 11801

Subject:

Multiplier for NYSDEC Funded Work

Dear Mr. Witkowski:

Pursuant to a telephone conversation between Raymond Lupe and Ralph Burger of NYSDEC and Michael Memoli of CDM, NYSDEC has agreed to apply CDM's 2.8 multiplier to the remaining Standby Contract work and to CDM's Title 3/EQBA work.

We are, therefore, requesting that, except for Mr. Lupe and Mr. Burger, all originals and copies of the very confidential information sent to you in my letter of February 22, 1996 be immediately returned to me.

Thank you in advance for your cooperation in this very sensitive issue. If you have any questions concerning this request, please call me directly at 516-496-8400.

Very truly yours,

CAMP DRESSER & McKEE

Vice President/Senior Associate

cc: R. Lupe, NYSDEC

R. Burger, NYSDEC

M. Memoli, CDM

R. McCarthy, CDM

E. Nasif, CDM

S. Tetley, CDM File: 2.1.1/1.4.6



environmental services 100 Crossways Park West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864

March 25, 1996

Mr. Lin Kan
Director of Landfill Remediation Program
NYCDEP
Bureau of Hazardous Materials Management
59-17 Junction Blvd., 8FL, HR
Corona, NY 11368-5107

Subject: Multiplier for NYSDEC Funded Work

Dear Mr. Kan:

Pursuant to a telephone conversation between Raymond Lupe and Ralph Burger of NYSDEC and Michael Memoli of CDM, NYSDEC has agreed to apply CDM's 2.8 multiplier to the remaining Standby Contract work and to CDM's Title 3/EQBA work.

We are, therefore, requesting that, except for Mr. Lupe and Mr. Burger, all originals and copies of the very confidential information sent to you in my letter of February 22, 1996 be immediately returned to me.

Thank you in advance for your cooperation in this very sensitive issue. If you have any questions concerning this request, please call me directly at 516-496-8400.

Very truly yours,

MM 1

Vice President/Senior Associate

cc: R. Lupe, NYSDEC

R. Burger, NYSDEC

M. Memoli, CDM

R. McCarthy, CDM

E. Nasif, CDM

S. Tetley, CDM File: 2.1.1/1.4.6

environmental services 100 Crossways Pair. West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 426-8864

March 25, 1996

Mr. Bal Bhandari NYCDEP Bureau of Hazardous Materials Management 59-17 Junction Blvd. Corona, NY 11368-5107

Subject: Multiplier for NYSDEC Funded Work

Dear Mr. Bhandari:

Pursuant to a telephone conversation between Raymond Lupe and Ralph Burger of NYSDEC and Michael Memoli of CDM, NYSDEC has agreed to apply CDM's 2.8 multiplier to the remaining Standby Contract work and to CDM's Title 3/EQBA work.

We are, therefore, requesting that, except for Mr. Lupe and Mr. Burger, all originals and copies of the very confidential information sent to you in my letter of February 22, 1996 be immediately returned to me.

Thank you in advance for your cooperation in this very sensitive issue. If you have any questions concerning this request, please call me directly at 516-496-8400.

Very truly yours,

CAMP DRESSER & MCKEE

Curtis F. Velsor, Jr.

Vice President/Senior Associate

cc: R. Lupe, NYSDEC

R. Burger, NYSDEC

M. Memoli, CDM

R. McCarthy, CDM

E. Nasif, CDM

S. Tetley, CDM

File: 2.1.1/1.4.6

environmental services 100 Crossways Park West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864

March 25, 1996

Mr. Gerard Burke NYSDEC Bureau of Construction Services Division of Hazardous Waste Remediation 50 Wolf Road Albany, NY 12233-7010

Subject: Multiplier for NYSDEC Funded Work

Dear Mr. Burke:

Pursuant to a telephone conversation between Raymond Lupe and Ralph Burger of NYSDEC and Michael Memoli of CDM, NYSDEC has agreed to apply CDM's 2.8 multiplier to the remaining Standby Contract work and to CDM's Title 3/EQBA work.

We are, therefore, requesting that, except for Mr. Lupe and Mr. Burger, all originals and copies of the very confidential information sent to you in my letter of February 22, 1996 be immediately returned to me.

Thank you in advance for your cooperation in this very sensitive issue. If you have any questions concerning this request, please call me directly at 516-496-8400.

Very truly yours,

CAMP DRESSERVE M

Vice President/Senior Associate

cc: R. Lupe, NYSDEC

R. Burger, NYSDEC

M. Memoli, CDM

R. McCarthy, CDM

E. Nasif, CDM

S. Tetley, CDM File: 2.1.1/1.4.6

environmental services 100 Crossways Park West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864

March 25, 1996

Mr. George Burkle Supervisor Town of Tusten PO Box 195 Narrowsburg, NY 12764

Subject: Multiplier for NYSDEC Funded Work

Dear Mr. Burkle:

Pursuant to a telephone conversation between Raymond Lupe and Ralph Burger of NYSDEC and Michael Memoli of CDM, NYSDEC has agreed to apply CDM's 2.8 multiplier to the remaining Standby Contract work and to CDM's Title 3/EQBA work.

We are, therefore, requesting that, except for Mr. Lupe and Mr. Burger, all originals and copies of the very confidential information sent to you in my letter of February 22, 1996 be immediately returned to me.

Thank you in advance for your cooperation in this very sensitive issue. If you have any questions concerning this request, please call me directly at 516-496-8400.

Very truly yours,

Curtis F. Velsor, Jr.

Vice President/Senior Associate

cc: R. Lupe, NYSDEC

R. Burger, NYSDEC

M. Memoli, CDM

R. McCarthy, CDM

E. Nasif, CDM

S. Tetley, CDM

File: 2.1.1/1.4.6

environmental services 100 Crossways Park West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864

March 25, 1996

Mr. David Moreira Waste Management Inc. 580 Edgewater Drive Wakefield, MA 01880

Subject: Multiplier for NYSDEC Funded Work

Dear Mr. Moreira:

Pursuant to a telephone conversation between Raymond Lupe and Ralph Burger of NYSDEC and Michael Memoli of CDM, NYSDEC has agreed to apply CDM's 2.8 multiplier to the remaining Standby Contract work and to CDM's Title 3/EQBA work.

We are, therefore, requesting that, except for Mr. Lupe and Mr. Burger, all originals and copies of the very confidential information sent to you in my letter of February 22, 1996 be immediately returned to me.

Thank you in advance for your cooperation in this very sensitive issue. If you have any questions concerning this request, please call me directly at 516-496-8400.

Very truly yours,

CAMP DRESSER & McKEE

Rurtis F. Veiser, Jr. Vice President/Senior Associate

cc: R. Lupe, NYSDEC

R. Burger, NYSDEC

M. Memoli, CDM

R. McCarthy, CDM

E. Nasif, CDM

S. Tetley, CDM

File: 2.1.1/1.4.6



environmental services 100 Crossways Park West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864

March 25, 1996

Mr. Khaja Moinuddin NYCDEP Bureau of Hazardous Materials Management 59-17 Junction Blvd., 8FL, HR Corona, NY 11368-5107

Subject: Multiplier for NYSDEC Funded Work

Dear Mr. Moinuddin:

Pursuant to a telephone conversation between Raymond Lupe and Ralph Burger of NYSDEC and Michael Memoli of CDM, NYSDEC has agreed to apply CDM's 2.8 multiplier to the remaining Standby Contract work and to CDM's Title 3/EQBA work.

We are, therefore, requesting that, except for Mr. Lupe and Mr. Burger, all originals and copies of the very confidential information sent to you in my letter of February 22, 1996 be immediately returned to me.

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Very truly yours,

JAIVII DRESSER & JICKER

Curtis F. Velsor, Jr.

Vice President/Senior Associate

cc: R. Lupe, NYSDEC

R. Burger, NISDEC

M. Memoli, CDM

R. McCarthy, CDM

E. Nasif, CDM

S. Tetley, CDM

File: 2.1.1/1.4.6

environmental services 100 Crossways Park West Woodbury, New York 11797 Tel: 516 496-8400 Fax: 516 496-8864

March 25, 1996

Mr. J. O'Connell NYSDEC 47-40 21st Street Long Island City, NY 11101

Subject:

Multiplier for NYSDEC Funded Work

Dear Mr. O'Connell:

Pursuant to a telephone conversation between Raymond Lupe and Ralph Burger of NYSDEC and Michael Memoli of CDM, NYSDEC has agreed to apply CDM's 2.8 multiplier to the remaining Standby Contract work and to CDM's Title 3/EQBA work.

We are, therefore, requesting that, except for Mr. Lupe and Mr. Burger, all originals and copies of the very confidential information sent to you in my letter of February 22, 1996 be immediately returned to me.

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Very truly yours,

Lit VIVIA

R&McKEE

Curtis F. Velsor, Jr.

Vice President/Senior Associate

cc: R. Lupe, NYSDEC

R. Burger, NYSDEC

M. Memoli, CDM R. McCarthy, CDM

E. Nasif, CDM

S. Tetley, CDM

File: 2.1.1/1.4.6

R. Cossy 1 St. Heityman

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010



Michael D. Zagata Commissioner

February 2, 1996

Mr Robert G. Litt Deputy County Attorney County of Nassau One West Street Mineola, NY 11501-4820

Dear Mr. Litt:

Re:

Nassau County Fire Training Center (DEC Site # 130042)

Declaration of Restrictions

This is to confirm our February 2, 1996 conversation concerning the Declaration of Restrictions for the above-referenced site. This agency and the State Department of Health have reviewed the proposed Declarations and determined that they are acceptable with only minor editorial changes suggested. The editorial changes that we have discussed are intended to distinguish "the site" from "areas of contamination" as these designations are used in paragraphs 1, 2 and 3 of the Declaration. Also the Department of Health should be capitalized in paragraph 1.

Please call me at (518) 457-1641 if you wish to discuss these comments further.

Sincerely,

George W. Heitzman, P.E. Senior Environmental Engineer

Division of Hazardous Waste Remediation

bcc: R. Cozzy/G. Heitzman

R. Corry 1 D. Hettyman

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010



Michael D. Zagata Commissioner

January 2, 1996

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center (Site #130042)

This is to confirm receipt of your December 21, 1995 transmittal of additional documentation for EQBA Payment #5. As you are probably aware, DEC has completed its review of the payment, as summarized in Ralph Burger's December 19, 1995 letter to Commissioner Waltz. Since the supplemental information you provided cannot now be incorporated in the payment review, it will be kept on file for review of the resubmittal.

Please call me at (518) 457-1641 if I can be of further assistance.

Sincerely,

George W. Heitzman, P.E.

Senior Environmental Engineer

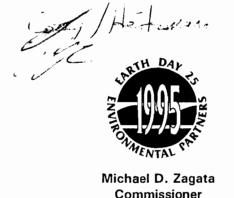
Division of Hazardous Waste

Remediation

bee:

R. Cozzy/G. Heitzman

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010



December 29, 1995

Mr. Stephen Bates, P.E.
Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Albany, NY 12203-3313

Dear Mr. Bates:

Re:

Nassau County Fire Training Center (Site #130042)

Declaration of Restrictions

Enclosed for your review and comment are the final proposed deed restrictions for the Nassau County Fire Training Center. These clauses appear to be consistent with the terms that DOH and DEC approved about 18 months ago. I am forwarding this for your final review in case DOH has developed additional requirements for such restrictions since that time.

If you have any suggested revisions, please call George Heitzman at (518) 457-1641 before Friday, January 12, 1995.

Sincerely,

Robert J. Cozzy, P.E., Chief Municipal Projects Section

Division of Hazardous Waste Remediation

enclosure

cc:

(M. Mason, w/enclosure)

(J. Eckl, w/enclosure)

=--

bcc: R. Cozzy/G. Heitzman (w/enclosure)

THOMAS S. GULOTTA
COUNTY EXECUTIVE



OWEN B. WALSH

RICHARD S. LEFFER
CHIEF DEPUTY FOR ADMINISTRATION

LAWRENCE J. BRENNAN
CHIEF DEPUTY FOR LITIGATION

COUNTY OF NASSAU

OFFICE OF THE COUNTY ATTORNEY NASSAU COUNTY EXECUTIVE BUILDING

ONE WEST STREET
MINEOLA, NEW YORK 11501-4820
516-571-3056
TELECOPIER 516-571-6604

December 27, 1995

0

George W. Heitzman, P.E. Senior Environmental Engineer Division of Hazardous Waste NYS Department of Environmental Conservation 50 Wolf Road Albany, New York 12233

Re: Declaration of Restrictions- Fireman's Training Center-Bethpage County Attorney RE - 3022

Dear Mr. Heitzman:

Please find enclosed a copy of the Declarations of Restrictions with attachments that shall be shortly forwarded to the Nassau County Legislature for their approval. Kindly review and advise as to any suggestions or comments that your Office may have regarding this Declaration.

If you have any questions or require additional information. please feel free to contact me at (516) 571-4113.

Very truly yours,

OWEN B. WALSH County Atterney

Robert G. Litt

Deputy County Attorney

Tax Certionari &

Condemnation

ATTACHMENT I NASSAU COUNTY FIREMAN'S TRAINING CENTER SUMMARY OF CHEMICALS OF POTENTIAL CONCERN

	CONCENT	PATION
CHEMICAL	On-Site Soil	Ground Water
CILLWICAL	(ug/kg)	(ug/l)
	(8-8)	\-8-7
VOLATILES		
Acetone	1 - 73	4 - 6,050
Benzene	7 - 130	1 - 1,500
Carbon Disulfide		0.4 - 4
Chlorobenzene	12	1.4 - 3.8
Chloroform		1 – 9
1,1-Dichloroethane		2 - 15
1,1-Dichloroethene		2 - 14
trans-1,2-Dichloroethene		0.9 - 1,600
Ethyl Benzene	1 - 2,500	1 - 3,000
Methylene Chloride		1 - 370
Methyl Ethyl Ketone		1 - 1,200
Styrene	0.9 - 3,300	
Tetrachioroethene	2 - 10	1 - 910
Toluene	1 - 7,100	1 - 12,000
1,1,1-Trichloroethane		0.8 - 220
Trichloroethene	6 - 3,000	1 920
Vinyl Chloride		1 - 210
Xylenes	0.7 - 28,000	0.6 - 16,000
<u>SEMIVOLATILES</u>		
Acenaphthene	3,908	
Anthracene		0.6 - 25
Benzoic Acid		0.8 - 150
Bis (2-ethylhexyl) Phthalate	280	3 - 860
Butyl Benzyl Phthalate	34 - 130	0.4 - 36
Di-n-Butyl Phthalate	40	
3,3-Dichlorobenzidine	2,700	
Diethyl Phthalate	23	
Di-n-Octyl Phthalate	29 - 590	0.6 - 100
Fluoranthene	34 - 500	0.8 - 63
Fluorene	5,600 - 6,500	0.1 - 560
Isophorone	990 - 1,500	
Naphthalene	280 - 23,000	0.3 - 1,500
Pyrene	30 - 1,200	1 - 150
PCBs/PESTICIDES		
PCB-1254	29	
Heptachlor	1.2 - 1.3	
перасщо	1.2 - 1.3	

0726-56-3102 FILE: NCFT2-3.WK1

DECLARATION OF RESTRICTIONS The Declaration is hereby effective as of

WITNESSETH:

WHEREAS, soil contamination at the Fireman's Training
Center in Bethpage consists of the chemicals listed in
Attachment No. 1 at levels that potentially threaten public
health, and

WHEREAS, the New York State Department of Environmental Conservation and the County of Nassau have agreed on the remediation steps to be taken in connection with said contamination which include restrictions to be recorded in the Nassau County Clerk's Office against the use of the Fireman's Training Center, as stated in the Record of Decision, dated February, 1993 attached as Attachment No. 2, and

WHEREAS, the Fireman's Training Center is identified as Section 47, Block 153, Lots 6 and 7 on the Land and Tax Map of Nassau County, and the contaminated areas to be restricted are identified by the attached metes and bounds descriptions and map and are attached as Attachment No. 3.

NOW, THEREFORE, the County of Nassau for itself and its successors and assigns, covenants and declares that:

- 1. Unless prior written approval by the New York State Department of Environmental Conservation and New York State Department of health (or any subsequently delegated agencies) is first obtained, there shall be no construction, use or occupancy of the contaminated site which results in the disturbance or excavation of the waste materials on site, which threatens the integrity of the asphalt cap or soil cover materials, or which results in human exposure to contaminated soils.
 - 2. Unless prior written approval by the above stated

agencies is obtained, there shall be no change in the use of the contaminated site in any way that is inconsistent with its use as a fire training center. If such a new use of the site is approved, any and all further remedial activities at the site deemed necessary and appropriate by the above stated agencies will be performed by the County of Nassau.

- 3. The County of Nassau, its successors and assigns will not disturb the contaminated site in any way, except to properly maintain the integrity of the remedial measures undertaken and maintained at the site pursuant to the terms of the Record of Decision attached as Attachment No. 2, which is incorporated herein and made a part hereof as if herein set forth at length.
- 4. This Declaration is and shall be deemed to be a covenant running with the land, binding the County of Nassau, its successors and assigns, and any agent, lessee or invitee of the County of Nassau, or any successor or assign of the County of Nassau is perpetuity or until such time the New York State Department of Environmental Conservation and the New York State Department of Health (or any subsequently delegated agencies) determine, in writing, that the Declaration is no longer necessary for the protection of human health and the environment. At such time, the covenant shall be null and void and have no effect upon the land.

COUNTY OF NASSAU

	Ву
APPROVED:	
Commissioner of Public Works FORM APPROVED:	
Deputy County Attorney	
APPROVED:	



Division of Hazardous Waste Remediation

Nassau County Fire Training Center

Site Number 130042 Bethpage, New York

Record of Decision

February 1993

Funded Under Title 3 of the 1986 Environmental Quality Bond Act



New York State Department of Environmental Conservation
MARIO M. CUOMO, Governor THOMAS C. JORLING, Commissioner

DECLARATION OF THE RECORD OF DECISION

SITE NAME AND LOCATION

Nassau County Fire Training Center Town of Oyster Bay Nassau County, New York Site Code: 130042

Funding Source: 1986 Environmental Quality Bond Act

STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for the Nassau County Fire Training Center inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law (ECL) and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC Section 9601, et., sec., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Exhibit A identifies the documents that comprise the Administrative Record for the site and includes the final Remedial Investigation and Feasibility Study (RI/FS) reports. The documents in the Administrative Record are the basis for the selected remedial action.

ASSESSMENT OF THE SITE

Actual or threatened release of hazardous waste constituents from this site, if not addressed by implementing the response action selected in this Record of Decision (ROD), may present a current or potential threat to public health and the environment.

SUMMARY OF REMEDY SELECTION

Based upon the results of the RI/FS for the Nassau County Fire Training Center and the criteria for selecting a remedy, the New York State Department of Environmental Conservation (NYSDEC) has selected a remedy consisting of an asphalt/concrete cap with institutional controls for shallow soils, bioventing of deep soils, pumping and treating on-site groundwater using three extraction wells, and pumping and treating off-site groundwater using twelve extraction wells.

The existing asphalt and concrete pavement will be extended over all areas of shallow soil contamination to prevent casual contact with contaminants. Deed restrictions will control future uses of the property, and will ensure notification of and approval by NYSDEC and NYSDOH if excavation into contaminated areas occurs. Bioventing, an innovative technology, will be attempted as a permanent remedy for both volatile and semivolatile contaminants found in deep soils. If bioventing is unsuccessful, vacuum extraction of volatile contaminants is retained as a contingent remedy. On-site and off-site groundwater will be extracted, treated on-site, and recharged to groundwater in compliance with discharge standards. If a recharge basin cannot be accessed to accept the flow from off-site extraction wells, a contingent remedy involving extraction from

seven wells, treatment, and discharge to reinjection wells will be implemented. A long-term groundwater monitoring program will be implemented to evaluate the performance of the remedial action, and to protect nearby public water supplies.

DECLARATION

The selected remedy is protective of human health and the environment, complies with State and Federal Standards, Criteria and Guidance (SCGs) that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. Waivers are justified for SCGs that will not be met. This remedy utilizes permanent solutions and innovative technologies to the maximum extent practicable, and satisfies the statutory preference for treatment as a principal element.

Because contaminated soils will remain on site in an untreated state, a review will be conducted no later than five years after completion of construction of the remedial action, and every five years thereafter, to ensure that the remedy continues to provide adequate protection of human health and the environment.

Date 19

Ann Hill DeBarbieri Deputy Commissioner

Office of Environmental Remediation

New York State Department of

Environmental Conservation

SECTION	47	BLOCK	B P/O LOT_	6
LIBER		PAGE	DATE	
LAST OWNER	OF RECORD _	COUNTY OF NASSAU		
ADDRESS OF	OWNER			
		PARCEI. NO	1	

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 185.98 feet to a point; Running thence and through Lot 6 South 15 Degrees 42 Minutes 05 Seconds West, 152.46 feet to the true point or place of beginning; Running thence along the easterly line of the parcel herein described, South 19 Degrees 18 Minutes 48 Seconds West, 34.18 feet to its point of intersection with the southerly line of the parcel herein described; Running thence along the southerly line of the parcel herein described North 83 Degrees 57 Minutes 47 Seconds West, 29.41 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 21 Degrees 43 Minutes 55 Seconds East, 33.17 feet to its point of intersection with the northerly line of the parcel herein described; Running thence along the northerly line of the parcel herein described South 86 Degrees 39 Minutes 44 Seconds East, 28.31 feet to the true point or place of beginning and containing 935 plus or minus square feet.

SECTION	4 /	BLOCK	B <u> </u>	6
LIBER		PAGE	DATE	
		COUNTY OF NASSAU		
ADDRESS OF	01111111	DADCET NO.		

PARCEL NO. 2

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 511.06 feet to a point; Running thence and through Lot 6 South 15 Degrees 42 Minutes 05 Seconds West, 143.03 feet to the true point or place of beginning; Running thence along the northerly line of the parcel herein described, South 72 Degrees 27 Minutes 39 Seconds East, 35.69 feet to its point of intersection with the easterly line of the parcel herein described; Running thence along the easterly line of the parcel herein described South 16 Degrees 40 Minutes 13 Seconds West, 68.49 feet to its point of intersection with the southerly line of the parcel herein described; Running thence along the southerly line of the parcel herein described North 66 Degrees 46 Minutes 52 Seconds West, 36.82 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 17 Degrees 27 Minutes 45 Seconds East, 64.83 feet to the true point or place of beginning and containing 2,410 plus or minus square feet.

SECTION	4 /	BTOCK	B b/O rol	
LIBER		PAGE	DATE	
LAST OWNER	OF RECORD _	COUNTY OF NASSAU		
ADDRESS OF	OWNER			
	-	DADCEL NO		

PARCEL NO. _____3

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 576.35 feet to a point; Running thence and through Lot 6 South 15 Degrees 42 Minutes 05 Seconds West, 251.58 feet to the true point or place of beginning; Running thence along the northerly line of the parcel herein described, South 68 Degrees 59 Minutes 27 Seconds East, 55.84 feet to its point of intersection with the easterly line of the parcel herein described; Running thence along the easterly line of the parcel herein described South 21 Degrees 32 Minutes 43 Seconds West, 83.11 feet to its point of intersection with the southerly line of the parcel herein described; Running thence along the southerly line of the parcel herein described North 67 Degrees 50 Minutes 01 Seconds West, 47.30 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 15 Degrees 36 Minutes 24 Seconds East, 82.52 feet to the true point or place of beginning and containing 4,259 plus or minus square feet.

SECTION	4/	BTOCK	B P/O LOIS 6 & /	-
LIBER		PAGE	DATE	-
LAST OWNER	OF RECORD	COUNTY OF NASSAU		-
ADDRESS OF	OWNER			-

PARCEL NO.____4_

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 324.53 feet to a point; Running thence and through Lot 6 South 15 Degrees 42 Minutes 05 Seconds West, 103.44 feet to the true point or place of beginning; Running thence along the southerly line of the parcel herein described, North 74 Degrees 57 Minutes 37 Seconds West, 300.28 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 15 Degrees 15 Minutes 52 Seconds East, 124.71 feet to its point of intersection with the northerly line of the parcel herein described; Running thence along the northerly line of the parcel herein described South 73 Degrees 57 Minutes 31 Seconds East, 309.65 feet to its point of intersection with the easterly line of the parcel herein described; Running thence along the easterly line of the parcel herein described South 19 Degrees 44 Minutes 26 Seconds West, 119.70 feet to the true point or place of beginning and containing 37,217 plus or minus square feet.

SECTION	4/		<u> </u>	
LIBER		PAGE	DATE	
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ADDRESS OF	OWNER			
		PARCEL N	05	

Beginning at a point said point being the prc. of a curve which connects the northerly line of Round Swamp Road with the westerly line of Winding Road (Crescent Avenue); Running thence distant along the westerly line of Winding Road (Crescent Avenue), in a northerly direction, 1,297.81 feet to its point of intersection with the dividing line between Lot 7 to the North and Lot 6 to the South; Running thence along said dividing line between Lot 7 to the North and Lot 6 to the South, North 74 Degrees 17 Minutes 55 Seconds West, 483.37 feet to a point; Running thence and through Lot 7 North 15 Degrees 42 Minutes 05 Seconds East, 76.49 feet to the true point or place of beginning; Running thence along the southerly line of the parcel herein described, North 74 Degrees 44 Minutes 44 Seconds West, 82.41 feet to its point of intersection with the westerly line of the parcel herein described; Running thence along the westerly line of the parcel herein described North 15 Degrees 50 Minutes 48 Seconds East, 88.44 feet to its point of intersection with the northerly line of the parcel herein described; Running thence along the northerly line of the parcel herein described South 74 Degrees 17 Minutes 55 Seconds East, 84.22 feet to its point of intersection with the easterly line of the parcel herein described; Running thence along the easterly line of the parcel herein described South 17 Degrees 01 Minutes 50 Seconds West, 87.82 feet to the true point or place of beginning and containing 7,341 plus or minus square feet.

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010



December 29, 1995

Mr. Stephen Bates, P.E. Bureau of Environmental Exposure Investigation New York State Department of Health 2 University Place Albany, NY 12203-3313

Dear Mr. Bates:

Re:

Nassau County Fire Training Center (Site #130042)

Declaration of Restrictions

Enclosed for your review and comment are the final proposed deed restrictions for the Nassau County Fire Training Center. These clauses appear to be consistent with the terms that DOH and DEC approved about 18 months ago. I am forwarding this for your final review in case DOH has developed additional requirements for such restrictions since that time.

If you have any suggested revisions, please call George Heitzman at (518) 457-1641 before Friday, January 12, 1995.

Sincerely,

Robert J. Cozzy, P.E., Chief

Municipal Projects Section

Division of Hazardous Waste Remediation

enclosure

cc:

(M. Mason, w/enclosure)

(J. Eckl, w/enclosure)

reviewed the first cut. Are there any new requirements from

THOMAS S. GULOTTA



ţh.

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

December 21, 1995

New York State Department of Environmental Conservation Division of Hazardous Waste Remediation 50 Wolf Road Albany, New York 12233-7010

Attn: George W. Heitzman, P.E.

Re: EQBA Grant Reimbursement Fireman's Training Center Bethpage, New York

Dear Mr. Heitzman:

As per our recent telephone conversation concerning the above subject, please find enclosed the following back-up materials you need to complete our last EQBA Grant reimbursement request.

- (1) Capital Project Claim Voucher G-01478 Work Item #7, Floating Product Investigation Dated April 26, 1990
- (2) Force Account Time Summaries for Michael Flaherty, Timothy Kelly, Scott Urban and Joseph DeFranco.

Please note that no documentation could be found to back-up the unit price of 150/ton as indicated on Capital Project Claim Voucher G-88743, Work Item #25, Removal of Drums, dated September 13, 1993.

George W. Heitzman, P.E. December 21, 1995 Page Two

Re: EQBA Grant Reimbursement Fireman's Training Center Bethpage, New York

If there are any questions concerning the above information, please contact me at (516) 571-6850.

Very truly yours,

Teta J. Withouski Peter J. Withowski

Director of Hazardous Waste Services

PJW

encls

cc: James A. Oliva, Division Head of Sanitation and Water Supply Michael Cohen, Grants Administration

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010

Mr. John M. Waltz Commissioner of Public Works County of Nassau 1 West Street Mineola, New York 11501

DEC 1 9 1995



Michael Zagata Commissioner

Re:

Contract No. C300052

Nassau Co. Fireman's Training

Site No. 1-30-042 Payment No. 5

Dear Commissioner Waltz:

We recently completed our review of Payment No. 5 for the above-referenced contract. Based upon that review, we approved payment in the amount of \$629,661.51 rather than the \$792,345.25 requested.

Costs claimed in the amount of \$162,683.74 have been disallowed per the Project Manager's attached disallowances.

Costs claimed on a payment request which are disallowed by the Department may be submitted for reconsideration within 60 days of the date of the disallowance letter or within the next payment period, whichever is longer. Unless resubmitted within this time period, the Department's determination to disallow shall be final and binding on the municipality. The resubmittal of disallowed costs must be accompanied by a request for payment (New York State Standard Voucher). Disallowed costs resubmitted on a payment request by the municipality must address the Department's reasons for disallowance and provide all necessary supporting documentation in order to be reconsidered.

Copies of the amended invoice and Standard Voucher are enclosed for your information.

If you have any questions regarding this matter, please contact Sandra Leyden, of my staff, at (518) 485-8403.

!		r	Sincerely,		
	bcc:	w/o enc. R. Cozzy	Reple ?	Burger	-
	bcc:	w/enc.	Ralph E. Burger	v	
		G. Heitzman	Principal Accoun	tant	
,		S. Leyden	Cost Analysis and	d Payments	Section
,		,	Bureau of Program	m Managen	nent
		LH/kmd	Division of Hazar	rdous Waste	Remediation
Enclosures		a:waltz.#5 Ralph Disk #7	FOR MEY-N	BERA	FILE SECTION
			i i i i i i i i i i i i i i i i i i i	and her has been here	manager and an area

SEE INSTRUCTIONS ON REVERSE SIDE BEFORE COMPLETING - PLEASE DO NOT REMOVE CARBON AC 92 (Rev. 1/84) STATE STANDARD VOUCHER OF 05 **NEW YORK** 2 P-Contract Originating Agency Orig. Agency Code Interest Eligible (Y/N) C300052 NYS Dept. of Environmental Conservation Payment Date (MM) (DD) (YY) Liability Date (MM) (DD) OSC Use Only 3 Payee 1D Additional Zip Code Payee Amount **11–**6000463 11501 4 Payee Name (Limit to 30 spaces) Merch/Inv. Rec'd Date (MM/DD/YY) 1099 Code "County of Nassau Payee Name (Limit to 30 spaces) Statistic Type Address (Limit to 30 spaces) 5 Ref/Inv. No. (Limit to 20 spaces) 810020-04 One West Street #125 Ref/Inv. Date (MM) (DD) (YY) Address (Limit to 30 spaces) Nassau County (Limit to 2 spaces)→ State City (Limit to 20 spaces) Mineola 11501 NYPurchase Description of Material/Service If items are too numerous to be incorporated into the block below, Quantity Unit Price Amount Order No. use form AC 93 and carry total forward. and Date Per attached invoices and schedules Summarized in Schedule 1A: Description Schedule 547 897. 40 551,198 | 10 Malcolm Pirnie Direct Labor 2 19,083. 28,408 | 74 3 Other Direct Costs - 2,067,30 -1,555 + 74Expenses 213/319.23 261,930 + 935 Subcontractor Costs 166,578 76 6 Nassau County Force Account 105,502,72 105,502 | 72 Adjustments 1,112,063 8 83 735 SUBTOTAL 834,047 | 63 662 801. State Share .75% 33,140, 41,702 | 38 Less 5% Retainage 792,345 25 AMOUNT DUE NASSAU COUNTY 629,661.51 629,6615 7 Payee Certification: I certify that the above bill is just true and correct; that no part thereof has been paid except as stated and that Total es from which the State is exempt are excluded. Discount Commissioner of Public Works Payee's Signature in Ink 792,345.25 Name of Company Net STATE COMPTROLLER'S PRE-AUDIT FOR AGENCY USE ONLY Certified For Payment I certify that this youcher is correct and just, and payment is approved. Merchandise Received of Net Amount Verified Date Authorized Signature Audited Page No. Special Approval Ву Date Title Expenditure Liquidation Dept. Cost Center Accum Orig Agency PO/Contract F/P Amount Statewide Dept 59 09000 *63803* (300052 09000

MUNICIPALITY'S APPLICATION FOR PAYMENT (TITLE 3 STATE ASSISTANCE CONTRACT)

. '*.*.

TO BE COMPLETED BY MUNICIPALITY	Comptant of Contract Va	FOR AGENCY USE ONLY
PAYEE (Name & Address) County of Nassau	C3000052	Orig. Agency Code 09000
Department of Public Works	Application No. 05	Date App. Rec'd 3/22/94
One West Street #125	Work Period Ending 3-16-94	
Mineola, N.Y. 11501	Employee ID No. 11-6000463	
With Final Payments Attar: Labor Affidavits F	or Payroll Period to Conform to New York St	ate Labor Law Section 220A
SCHEDULE I	FINANCIAL STATEMENT	
	Reimbursment Amounts) CONTRACT WORK PE	RFORMED 91 Sh
Line 1. Original Contract 2. Amendments 3. Ret Contract Amount 4. Haximum Retainage (5% of Line 3) 2,358,000 2,358,000 117,900	Line 1. Work performed in previous a 2. Work performed this applicat 3. Work performed to date 4. Retainage 5. Work performed to date less 6. Less previous payments 7. Payment this application	100 063 801356 1,744,283.49
SCHEDULE I!	CERTIFICATION BY MUNICIPALITY	
Tahn M. Walt- (Name) the Municipality herein referenced. According payment are correct, all work has been perform contract account up to and including the last 3/17/94 (Date)	to my knowledge and belief all items and ammed and/or materials supplied, the foregoing	is a true and correct statement of the
SCHEDULE III	CERTIFICATION BY ENGINEER / PRO	DJECT MANAGER
I certify that I have checked this applicant statement of work performed and/or materials supplied in accordance with the contract requirement of the contract requirement	estion for playment; that/to the best of sw/kr supplied by the contractor, and that the wor irements. (Signature) ENDORSED BY DEPARTMENT OF ENVIRONMENTAL CO	me
EXAMINED AND APPROVED BY RESPONSIBLE DIVISION 12/19/95 DATE SIGNATURE	OR BUREAU APPROVED FOR PAYME	ENT BY DIVISION OF FISCAL MANAGEMENT SIGNATURE



New York State Department of Environmental Conservation

MEMORANDUM

TO:

Cindy Wabnick, Project Administration Unit

FROM:

George W. Heitzman, DEC Division of Hazardous Waste Remediation

SUBJECT:

Nassau County Fire Training Center, Payment #5

DATE:

December 5, 1995

Attached for your review are two copies of Payment #5 for the County of Nassau, including extensive summary schedules. I have marked up the top copy in red and summarized the disallowances below. Nassau County was notified about several missing items identified below, but they have not been received to date.

Summary

The following summary corresponds to the amounts listed on the Standard Voucher:

Description	Amount Requested	Eligible Amount
Malcolm Pirnie Direct Labor	\$ 551,198.10	\$ 547,897.40
Other Direct Costs	28,408.74	19,083.41
Expenses	-1,555.74	-2067.30
Subcontractor Costs	261,930.93	213,319.23
County Force Account	166,578.76	0.00
Adjustments	105,502.72	46,492.80
SUBTOTAL	1,112,063.51	841,640.64
State Share (75%)	834,047.63	631,230.48
5% Retainage	41,702.38	31,561.52
Total Claim	\$ 792,345.25	\$ 582,753.86

Schedule 1A

The handwritten amounts reflect the disallowances made on Schedules 2 through 8 by DEC Task Number. Note that the direct labor amounts for Tasks 9, 10 and 11 have been mixed up. I have left them in the incorrect order for consistency with Nassau County's format.

Schedule 2

Most of the handwritten changes to Schedule 2 are corrections of contractor salary rates, DEC salary caps and number of hours, based on comparison with the Malcolm Pirnie Invoices. These result in both increases and decreases in the eligible amount. On Schedule 2A, I have circled the correct invoice totals

Ost Grove

and changed the incorrect totals. Note that the DEC Task numbers are different from the Nassau County Task numbers. I have listed both task numbers and the task description on the tab for Schedule 2 if you need to cross reference them.

Schedule 3 (Other Direct Costs)

The disallowances listed below are marked on Schedule 6 and summarized on Schedule 3. Note that I am deferring to PAU on the eligibility of In-house Computer costs, which were disallowed on past submittals. Nassau County and Malcolm Pirnie have appealed those disallowances, and we have requested a determination from the Contract Development Section (see attached memo). To date, this issue has not been resolved. In-house computer costs have not been disallowed in this payment, but I have totalled them on Schedules 6 and 3 for your convenience.

- Task 2, Voucher # G01478 This voucher was not included in the submittal, and so the entire \$9,994.50 was disallowed. Nassau County was notified of the missing voucher, and it may be forthcoming.
- Task 7 In-house computer costs were moved from the Expense category to the Other Direct Cost category for consistency. No net deduction was made.
- **Task 9, Voucher #G88742** Costs for rush duplication of slides were disallowed because all Citizen Participation activities were completed well before the date of the order.
- **Task 15, Voucher #G28675** In-house computer costs were moved from the Expense category to the Other Direct Cost category for consistency. No net deduction was made.
- Task 18, Voucher #G16706 The cost of outside drafting services was reduced to the amount of the receipt (\$486.00). The disallowed cost appears to be a 10% markup.
- Task 20, Vouchers #G16699, #G28354, #G77567 In-house computer costs were moved from the Expense category to the Other Direct Cost category for consistency. No net deductions were made.
- **Task 21, Voucher #G28352** In-house computer costs were moved from the Expense category to the Other Direct Cost category for consistency. No net deduction was made.
- **Task 22, Voucher #G45652** Costs from Steve Moran's expense report (\$72.59) were disallowed because no receipts were provided.
- Task 24, Voucher #G45945 Sales taxes from Amendola's fence Co (\$12.15) were disallowed.

Schedule 4 (Expense Costs)

Note that Malcolm Pirnie has used the Expense category as the method for achieving budget compliance. If the labor and other direct costs cause a task to exceed its budget, the expense total is set to a negative amount to balance the budget.

- **Task 2, Voucher # G01478** This voucher was not included in the submittal, and so the entire \$(454.56) was disallowed. Upon receipt of the missing voucher, this balance factor may be included.
- Tasks 7, 15 and 20 In-house computer costs were moved from the Expense category to the Other

Direct Cost category for consistency. No net deductions were made.

Schedule 5 (Contractor Costs)

Task 6, Voucher #G40322 - The cost of the well vault was reduced to the bid amount of \$1,275.00 due to the lack of justification and documentation of a change order.

Task 9, Vouchers #G00456, G00462, G00485, G00493 - Costs for Holt Hanifin have been disallowed due to the lack of a subcontract.

Task 21, Voucher #G88743 - Clean Venture's subcontract costs were reduced to the amount of their bid, adjusted for the increase in tonnage from 50 to 57.1 tons. In the absence of a change order, the costs of extra work and the increase in unit cost for waste disposal cannot be funded. Nassau County was notified of this missing change order, and may provide it shortly.

Task 22, Voucher #G16704 - Stainless steel was not authorized for the monitoring well riser. The unit cost was reduced to that of PVC riser, \$12/ft.

Schedule 7 (Force Account)

All force acount costs were disallowed because no time records were included in the payment package. Nassau County was advised of the missing records and may submit them shortly. Because administrative costs cannot be reimbursed under force account, costs for Witkowski, Miller and Murtha are ineligible. Costs for Flaherty, Kelly, Defranco and Urban may be eligible upon review of the time records and a determination that they provided a service that would have otherwise been done by a consultant, and no duplication of effort occurred.

Schedule 8 (Adjustments)

Note that the column headings for Cumulative and Incremental Costs appear to be reversed on Schedule 8.

Nassau County has re-applied for In-house computer expenses which were disallowed on previous payments. I defer to PAU for a determination of the eligibility of these costs. Note that disallowed computer expenses from Payment 4 totalled \$5,997.08, while the total on Schedule 8A is \$12,978.38. If PAU determines that computer expenses are eligible, you should verify that the Schedule 8A total accurately reflects disallowed costs from Payments 2 and 3.

For IRM Costs Previously Disallowed, a review of Payment 4 (copy attached) indicates that, although the project manager disallowed the costs, they were apparently paid in the final analysis. On the handwritten correction to line A-1 of the Standard Voucher, the entire requested amount of burdened direct labor (\$189,537.73) was paid. Therefore it appears that no direct labor was disallowed, and the 2.8 multiplier was also accepted. The only disallowance on Payment 4 was made on line A-2 (Other Direct Costs), which were the In-house computer expenses. Note that the handwritten bottom line (\$148,636.65) corresponds to amount included on Ed Califano's cover letter to Ludwig Hasl. As a result, resubmittal of these costs should not be paid in Payment Request 5.

For the Adjustment For The Direct Labor Multiplier, the discussion above indicates that the 2.8 multiplier was allowed in Payment 4, and the adjustment should only be applied to Payments 2 and 3. On Schedule 2, Nassau County claims that the total of Payments 2 and 3 was \$256,248.51, so adjusting from a 2.5 to a 2.8 multiplier gives an increase of \$30,749.82. Please verify that the amounts listed for burdened direct labor for Payments 2 and 3 (\$72,013 and \$184,235) are correct.

Attchments: Payment Transmittal Memo

Payment #4 Letter

Memo on In-House Computer Costs

Nassau County Submittal Letter, Voucher & MAP Form

Payment Summary Binder and Invoices (2 copies)

R. Corry 1 J. Heityman

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010



October 10, 1995

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center (Site #130042)

In response to your October 2, 1995 letter, enclosed are the tables of EQBA maximum labor rates for the period April 1994 through March 1996. With regard to the designation of New York State task codes, DEC will adopt the task codes used by Nassau County in order to simplify review of the payment.

Please call me at (518) 457-1641 if I can be of further assistance.

Sincerely,

George W Heitzman, P.E.

Senior Environmental Engineer

Division of Hazardous Waste

Remediation

GWH/a:.ftc //c

PROJECT STAFF LABOR RATES - COLUMN G. 4/1/94 TO 3/31/95

	Column G. Average Labor Rates (Form #1A)		Range Factor		Upper Range	Grant Maximum
ENGINEERING STAFF						
Junior Engineer		X	112%	==		\$19.00
Assistant Engineer		X	111%	==		\$25.00
Senior Engineer		X	110%	=		\$31.00
Associate Engineer		X	110%	=		\$38.00
Principal Engineer	•	X	109 %	=		\$45.00
Owner/Officer	·	Х	108%	=		\$48.00
GEOLOGY STAFF						
Junior Geologist		X	112%	=		\$19.00
Assistant Geologist		X	111%	=		\$26.00
Senior Geologist		Х	110%	=		\$30.00
Associate Geologist		X	110%	=		\$39.00
CHEMIST/BIOLOGIST/SCIENTIST ST	ΓAFF					
Chemist Trainee/Chemist		Х	112%	=_		\$19.00
Chemist I		Х	111%	=		\$26.00
Chemist II		Х	110%	=		\$30.00
Chemist III		Х	110%	=		\$39.00
SURVEYOR/INSPECTOR/CITIZEN PA	ARTICIPATION	SPEC	IALIST/			
Level I		X	112%	=		\$16.00
Level II		X	112%	=_		\$19.00
Level III		X	111%	=		\$22.00
Level IV		X	110%_	=		\$26.00
Level V		X	110%	=		\$30.00
OTHER - SPECIFY			_			
IOTE: The highest labor rate for grant						

NOTE: The highest labor rate for grant reimbursement will be limited to \$48.00/hr. or \$99,800 year for the current year.

PROJECT STAFF LABOR RATES - COLUMN H. 4/1/95 TO 3/31/96

			T -			
	Column H. Average Labor Rates (Form #1A)		Range Factor		Upper Range	Grant Maximum
ENGINEERING STAFF						
Junior Engineer		X	112%_	=		\$20.00
Assistant Engineer		Х	111%_	=		\$26.00
Senior Engineer		Х	110%			\$32.00
Associate Engineer		X	110%_	=		\$40.00
Principal Engineer		X	109%	=		\$47.00
Owner/Officer		X	108%	=		\$50.00
GEOLOGY STAFF						
Junior Geologist		X	112%	=		\$20.00
Assistant Geologist		X	111%	=		\$27.00
Senior Geologist		X	110%	=		\$31.00
Associate Geologist		X	110%	=		\$41.00
CHEMIST/BIOLOGIST/SCIENTIST STA	\FF					
Chemist Trainee/Chemist		Х	112%	=_		\$20.00
Chemist I		х	111%	=_		\$27.00
Chemist II		X	110%	=		\$31.00
Chemist III	-	х	110%	=		\$41.00
SURVEYOR/INSPECTOR/CITIZEN PAI TECHNICIAN/DRAFTER STAFF	RTICIPATION	SPEC	IALIST/			
Level I		Х	112%_	=		\$17.00
Level II		X	112%	=		\$20.00
Level III		Х	111%	==		\$24.00
Level IV		Х	110%	=		\$27.00
Level V		X	110%_	=		\$31.00
OTHER - SPECIFY						
				00/1	0104 000	

NOTE: The highest labor rate for grant reimbursement will be limited to \$50.00/hr. or \$104,000 year for the current year.

THOMAS S. GULOTTA COUNTY EXECUTIVE



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

October 2, 1995

Mr. George W. Heitzman Sanitary Engineer Bureau of Eastern Remedial Action Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 50 Wolf Road Albany, NY 12233-7010

Re: Fireman's Training Center EQBA Hazardous Waste Grant N.Y. State Contract C300052 Design Phase

Dear Mr. Heitzman:

As you are aware, the County has completed all work associated with the design phase for the above referenced project.

In order for the County to submit a reimbursement request, the following information is requested:

- Listing of N.Y. State Task Codes for the design phase
- N.Y. State Rate Schedule for the time period of October, 1994 to present

Finally, the County is requesting a waiver on the 365 day time frame for submitting reimbursements.

UCI

Mr. George W. Heitzman September 28, 1995

Page Two

Re: Fireman's Training Centeer EQBA Hazardous Waste Grant N.Y. State Contract C300052 Design Phase

If you have any questions, please contact me at (516) 571-6850.

Very truly yours,

Peter J. Witkowski

ite J. Withwali

Director of Hazardous Waste Services

PJW:tj

cc: James A. Oliva

Division Head of Sanitation & Water Supply

Walter Henneburger Public Works Grants



New York State Department of Environmental Conservation

MEMORANDUM

Brenda Moulhem, Supervisor of Minority & Women's Business Lineapart.
Kelly Bologna, Supervisor, Thru: Ralph E. Burger, Principal Accountant, DER

SUBJECT:

DATE:

SEP 17 1995

This is to verify the telephone conversation of September 11, 1996 giving approval for the release of the sixth payment on the following project:

C300052

Nassau Co. Fireman's Training Center

Site No. 1-30-042

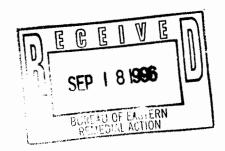
We understand that the utilization plan has not yet been approved. Therefore, we will contact you at a later date regarding the release of future payments.

If you need additional information or have any questions, please contact Amy Feiden, of my staff, at 5-8403.

√G. Heitzman cc:

V. Alfonso

a:nassau.#6 Ralph Disk #11



Hectzinan



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

August 31, 1995

Camp, Dresser & McKee 100 Crossways Park West, Suite 415 Woodbury, New York 11797

Attn: Michael A. Memoli, P.E.

Senior Associate

Re: Fireman's Training Center Remediation Project

Remedial Design Budget Revision

Gentlemen:

The County has reviewed your August 14, 1995 request for reallocating funds from bioventing to the groundwater treatment design for the addition of design, bid services and recommendation of award in conjunction with the rebid of the above referenced project.

Upon review the County will give authorization to reallocate \$35,000 from Bioventing to Groundwater Treatment.

If you have any questions, please contact Peter Witkowski, Director of Hazardous Waste Services, at 571-9600

Very truly yours,

🕉 ohn M. Waltz, P.E.🥍

Commissioner of Public Works

JMW: KGA: tj

cc: James A. Oliva, Division Head of Sanitation & Water

Supply

√ George Heitzman, NYSDEC

<FP | | 1995</p>

Vision of Sanitation and Water Supply West Street, Mineola, New York 11501

	rge Heitzman, San	· Lug ·	Date: July 10, 1995
	State DEC	PROJE O T:	FTC Remedial Design
	Wolf Rd. any, NY 12233		
	111y, NT 12233	CONTRACT	
		ITEM:	Quarterly Result
Gentlemen:			
We are	sending you the follow	ing sheets:	
	X Herewith		J .,.
•	Under separa	ate cover	
Quan- tity	Drawing Number		Title
		Quarterly	Results
		_	
Proposed by			
Prepared by			
These	AFO;	ced.	
	are:	ked. nd returned for correc	tion.
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	To be check Examined as Not approved	nd returned for corrected.	tion.
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REMARKS:	To be check Examined as Not approve Approved as Approved. For your inf	nd returned for corrected. s noted. formation and use.	Yours very truly,
These	To be check Examined as Not approve Approved as Approved. For your inf	nd returned for corrected. s noted. formation and use.	

GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

WELL#		BP-48	48			RP-4C	40			Q	BD_41	
SAMPLE DATE	8/17/94	11/2/84	3/28/95	3/28/95	8/18/94	11/2/94	3/28/85	3/20/05	8/18/04	11/4/04	3/20/08	370005
LABORATORY	DPW		DPW	Weston	DPW	DPW	DPW	Weston	DPW	DPW	DPW	Weston
COMPOUND												
NOMETHANE	BOL	3.9	BOL	BDL	BDL	80L	BDL	BDL	AN	BDL	BDL	BDL
CHLOROMETHANE	BDL	BDL	80	BDL	BDL	BDL	BDL	BDL	AN	BDL	BDL	BDL
VINYL CHLORIDE	7.7	23.4		BDL	BDL	BDL	BDL	BDL	ΑN	BDL	9.0	BDL
BROMOMETHANE & CHLOROETHANE	BOL	BDL	В	BDL	BDL	BDL	BDL	BDL	¥	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	0.4	2.1		BDL	BDL	BDL	BDL	BDL	Ą	BDL	BDL	BDL
1,1-DICHLOROETHENE	10.5	34.5	33.3	BDL	2.4	2.0	2.4	BDL	Ϋ́	BDL	BDL	BDL
METHYLENE CHLORIDE	BDL	3.6	2.8	BDL	BDL	BDL	6.0	BDL	AA	BDL	1.0	BDL
1,2-T-DICHLOROETHENE	BOL	3.3	2.4	BDL	BDL.	BDL	BDL	BDL	Ϋ́	BDL	BDL	BDL
1,1-DICHLOROETHANE	6.2	9.8		BDL	0.4	0.3	4.0	BOL	¥	BOL	1.2	BDL
2,2-DICHLOROPROPANE & cis-1,2-DICHLOROETHENE	30.0	225.0		260.0	12.6	8.9	16.5	BDL	Ϋ́Z	BDL	6.4	2.4
CHLOROFORM	BOL	BDL	BDL	BDL	BDL	1.5	4.0	BDL	Ϋ́	BDL	1.8	BDL
BROMOCHLOROMETHANE	BDL	BDL	BC	BDL	BDL	BDL	BDL	BDL	Ϋ́	BDL	BDL	BDL
1,1,1—TRICHLOROETHANE	41.5	92.2		47.0	10.0	9.6	10.9	5.4	Ϋ́	BDL	9.0	BDL
1,1-DICHLOROPROPENE	BDL	BDL	BDL	NA	BDL	BDL	BDL	Ϋ́	Ϋ́	BDL	BDL	ΝA
CARBON TETRACHLORIDE	BDL	BDL	В	BDL	BDL	BDL	BDL	BDL	ΑN	BDL	BDL	BDL
1,2-DICHLOROETHANE	20.4	43.5	54.5	35.0	BDL	BDL	BDL	BDL	ΑN	BDL	9.0	BDL
TRICHLOROETHYLENE	26.5	87.2		43.0	9.5	5.7	6.8	3.6	Ϋ́	0.4	BDL	2.3
1,2-DICHLOROPROPANE	BDL	BDL		BDL	BDL	BDL	BOL	BDL	Ϋ́	BDL	7.1	BDL
BROMODICHLOROMETHANE & DIBROMOMETHANE	BDL	BDL		BDL	BDL	1.8	4.8	BDL	Ϋ́	BDL	4.5	BDL
cis-1,3-DICHLOROPROPENE	BOL	BDL	BOI.	BDI.	BDL	BDL	BOL	BDL	NA	BDL	BDL	BDL
trans-1,3-DICHLOROPROPENE	BDL	BDL	E E	BDL.	BOL	BCL	BDL	BDL	NA	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	BDL	12.8		BDL BDL	BÜL	BOL	BDL.	BDL	NA	BDL	BDL	BDL
1,3-DICHLOROPROPANE	BDL	BDL	~	BDL	BDL	BDL	BDL	BOL	NA	BDL	BDL	BDL
IETRACHLOROETHYLENE	124.0	171		410.0	73.8	33.2	48.4	22.0	Y Y	3.1	26.8	5.2
DIBROMOCHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	1.6	1.5	BDL	NA	BDL	1.4	BDL
1,2-DIBROMOETHANE	8.5	80.1	16.0	BDL.	BDL	BDL	BDL	BOL	Υ	BDL	BDL	BDL
CHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	AA	BDL	BDL	BOL
1,1,1,2-TETRACHLOROETHANE	BDL	10.0	BOL	BDL	BDL	1.4	BDL	BDL	NA	BDL	BDL	BDL
BROMOFORM	BDL.	8.7	BDL	BDL	BDL	2.1	BDL	BDL	A A	BDL	BDL	BDL
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Ϋ́	BDL	BDL	BDL
1,2,3-TRICHLOROPROPANE	BDL	BDL	BDL	BDL.	BDL	BDL	BDL	BDL	ΑN	BDL	BDL	BOL
BROMOBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Ϋ́	BDL	BDL.	BDL
1,2-DIBROMO-3-CHLOROPROPANE	BDL	BOL	BDL	BDL	BDL.	BDL	BDL	BDL	NA	BDL	BDL	BDL
	275.7	808.9	692.2	795	108.4	68.1	83	31		3.5		8.8
Legend BDI - Below Detection Limit											NOTE: all results in ppb	its in ppb

<u>Legend</u> BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW — Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston — Weston Labratories, Liomille, PA.

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

WELL#		BP4B	48			BP-4C	4			8	BP-41	
SAMPLE DATE	8/17/94	11/2/94	03/28/95	3/28/95	8/19/94	11/2/94	3/29/95	3/29/95	8/18/94	11/4/84	3/28/95	3/29/95
LABORATORY	DPW	DPW	DPW	Weston	DPW	DPW	DPW	Weston	MAG	DPW	DPW	Weston
COMPOUND												
1	AN NA	Ϋ́	ΑĀ	¥	ΨX	ΑN	ΑN	ΑN	ΑN	Ϋ́	Ϋ́	ΑΝ
METHYL TERT BUTYL ETHER	ΑN	Ϋ́	Ϋ́	Ą	Ϋ́	¥	Ą	Ϋ́	Ą	ĄZ	AN A	¥
2-BUTANONE	AN	NA	NA	NA	ΑN	Ϋ́	Ϋ́	Ϋ́	¥	ΑN	ΑN	ΥN
CARBON DISULFIDE	ΑN	NA	NA	NA	NA	AN	AN	ΑN	¥	¥	Ą	٧X
2-HEXANONE	AN	NA	NA	NA	NA	AN	ΝΑ	Ϋ́	Ϋ́	Ϋ́	Ϋ́	٧X
4-METHYL-2-PENTANONE	ΑN	ΥN	ΑN	ΝA	AN	NA	NA	AN	ΑN	ΑN	Ą	Ϋ́
BENZENE	112.0	169.0	664.0	430.0	BDL.	BDL	1.2	BDL	NA	BDL		BDL
TOLUENE	1.7	2.2	1.5	BDL	BDL	BDL	-	BDL	ΝA	BDL	7.	BDL
CHLOROBENZENE	BOL	BDL	1.2	BDL	BOL	BDL	BDL	BDL	NA	BDL	BDL	BDL
ETHYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	ΑN	BDL	BDL	BDL
M, P-XYLENE	BDL	BDL.	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL	BOL
O-XYLENE	21.9	34.3	141.0	31.0	BDL	BDL	BDL	BDL	AN	BDL	BDL	ВОГ
STYRENE	BD L	BOL	BDL	Ϋ́	BDL	BDL	BDL.	NA	AN	BDL	BDL	Ϋ́Z
ISOPROPYLBENZENE	3.5	3.1	3.8	Ϋ́	BDL.	BOL	BDL	NA	AN	TOB	BDL	∀ Z
n-PROPY-&BROMO-&1,3,5-TRIMETHYLBENZENE	2.4	BDL	2.1	NA A	BDL	BDL	BDL	ΑN	NA	HOB	BDL	¥
1,3,5—TRIMETHYLBENZENE	BD L	BOL	BDL	ΑN	BDL	BDL	BDL	NA	NA	TOB	BDL	¥
4-CHLOROTOLUENE	BDL	BDL	BDL	NA	BDL	BDL	BDf.	NA	NA	108	BDL.	¥
tert-BUTYLBENZENE	8.8	BDL.	6.9	AN	BDL	BDL	BDL	AN	ΝA	BDL	BDL	¥
1,2,4—TRIMETHYLBENZENE	BOL	BDL	BDL	ΑN	BDL	BDL	BDL	ΑN	ΝA	BDL	BDL	¥Z
8ec-BUTYLBENZENE	BDL	BOL	1.6	¥	BOL	BDL	BDL	Y Y	Ϋ́	BDL	BDF	AN
P-ISOPROPYLTOLUENE	BD	BDL	BDL	¥	BDL	BDL	BDI.	¥	Y V	BDL	BDL	AN
1,3-DICHLOROBENZENE	BDL	BDL	ם	BDL	BDL	BDL.	BDL	BDL	NA	TIGE	TOB	BDL
1,4-DICHLOROBENZENE	7.4	7.5	7.4	BDL	BDL	BDL.	BDL	BDL	NA	108	TOB	BDL
N - BUTYLBENZENE	BDL	4.1	1.1	Ϋ́	BDL	1.7	BDL	NA	NA	TIGE	HDE	Ϋ́Z
1,2-DICHLOROBENZENE	- :	1.0	1.4	BDL	BDL	BDL	BDL	BDL	AN	BDL	BDL	BDL
1,2,4~TRICHLOROBENZENE	7.0	9.3	7.9	AA	BD L	BDL	BDL	AA	ΝA	BDL	BDL	¥
HEXACHLOROBUTADIENE	3.7		BOL	Ą	BDL	BDL.	BDL	NA	NA	BDL	TOB	¥
NAPTHALENE	5.3	BDL	BDL	¥	BDL	BDL	BDL	NA	NA	BDL	TOB	¥
1,2,3-TRICHLOROBENZENE	2.4	2.9	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL	BDL
	,											
TOTAL VOC (CONC.)	452.6	1046.7	1534.1	1256.0	108.4	8.69	95.4	31.0	NA	3.5	58.8	6.6

Legend BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
Weston -- Weston Labratories, Lionville, P.A.
DPW -- Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y.

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

MEIT#		BP-9B	.9B			BP-9C	ည်			BP-10B	108	
SAMPLE DATE	8/17/94	11/2/94	3/28/95	3/29/95	8/18/94	11/2/94	3/31/95	3/31/95	8/16/94	11/4/94	4/13/95	4/13/95
LABORATORY	MdQ	DPW	MAG	Weston	DPW	DPW	DPW	Weston	DPW	DPW	DPW	Weston
DICHLORODIFLUOROMETHANE	BDL	BDL	BDL	BOL	BOL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROMETHANE	BDL	BOL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
VINYL CHLORIDE	0.4	1.0	8.0	BDL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	BDL
BROMOMETHANE & CHLOROETHANE	BDL	BOL	BOL	BDL	BDL	BDL	BDL	BDL.	BDL	BOL	BDL	BDL
TRICHLOROFLUOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL.	BDL
1,1-DICHLOROETHENE	3.6	9.9	6.8	BOL	BDL	BDL	BOL	BDL	BDL	BDL	BDL.	BDL
METHYLENE CHLORIDE	BDL	BDL	1.1	BOL	BDL.	BDL	BDL	BDL.	BDL	BDL	BD L	BDL
1,2-T-DICHLOROETHENE	TO8	BOL	1.1	BDL.	BDL	BDL	BDL	BDL	BOL	BDL	B	BDL.
1,1-DICHLOROETHANE	1.1	1.2	1.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL.
2,2-DICHLOROPROPANE & cis-1,2-DICHLOROETHENE	24.6	125.0	161.0	82.0	BOL	BDL	BOL	BDL	BDL	BDL	BDL	BOL
CHLOROFORM	BOL	BDL	BDL	BOL	BDL	BOL	BDL	BDL	BDL	BDL	BOL	BDL.
BROMOCHLOROMETHANE	l BDL	nge -	BDL	BOL	BDL	BDL	BDL	BDL		BDL	BDL	BDL
1,1,1—TRICHLOROETHANE	50.9	32.5	37.8	14.0	BDL	BOL	BDL	BDL	11.2	108	BDL	BOL
1,1—DICHLOROPROPENE	BOL	BOL	BDL	NA	BOL	BDL	BOL	ΝA	BDL	BDL.	BDL	¥
CARBON TETRACHLORIDE	l BDL	BDL	BDL	BOL	BDL	BDL	BDL	BDL	BOL	BDL	BDL	BDL
1,2-DICHLOROETHANE	BDL	1.8	1.3	BOL	BDL	BDL	BOL	BDL	BOL	BDL	BDL	BDL
TRICHLOROETHYLENE	5.9	21.4	28.5	8.7	BOL	BDL	BOL	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROPROPANE	BDL.	BDL	BDL	BDL	BDL	BDL	BOL	BOL	BDL	BDL	BDL	BDL
BROMODICHLOROMETHANE & DIBROMOMETHANE	BOL	2.5	2.0	BOL	BDL	BOL	BDL	BOL	BDL	BDL	BDL	BDL
cis-1,3-DICHLOROPROPENE	BDL	BOL	BDL	90	BDL.	B DL	BDL.	BOL	BDL.	BDL	BDL	BDL
trans-1,3-DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BOL	BDL	BOL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	BOL	3.7	2.5	BOL.	BDL	BDL	BOL.	BDL	BOL	BDL	BDL	BDL
1,3-DICHLOROPROPANE	80F	8	BDL	8 0L	ı,	BOL	B DL	BDL	BDL		BDI.	BDL
TETRACHLOROETHYLENE	37.4		100.0	98.0	1.9	2.4	BDL.	BDL	BDL	3.7	BOL	BOL
DIBROMOCHLOROMETHANE	BDL	BDL BDL	2.7	BDL	8 0Ľ	BDL	BDL BDL	BOL	BDL	BDL	BDL	BDL
1,2-DIBROMOETHANE	80 L	BDL.	8 0L	B D	B D.	BDL	8 0	BDL	B DL	BDľ.	BDL	BDL
CHLOROBENZENE	BOL	BOL	BDL	BDL	BDL	BDL	BOL	BDL	BOL	BOL	BOL	BDL
1,1,1,2-TETPACHLOPOETHANE	_ BDL∵_	2.0	BDL	BDL	BOL	BDL	BOL	BDL.	TOB	BDL	BDL BDL	BOL
BROMOFORM	708	าดย	708	BDL	BOL	BDL	BDL	108	708	BDL	BDL	BDL.
1,1,2,2-TETRACHLOROETHANE	108	708	าดย	BDL	BDL	BDL	BDL	108	TOB	BOL	BDL	BDL
1,2,3-TRICHLOROPROPANE	BDL	BDL	708	BOL	BDL	BOL	BDL	BDL	TGB	708	BDL	BOL
BROMOBENZENE	BOL	BDL	708	BOL	BDL	BDL	TQ8	708	708	1 08	BOL	BOL
1,2-DIBROMO-3-CHLOROPROPANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	708	BDL	BOL	BDL
	93.9	297.4	349.7	202.7	4.8	4.2	0	0	11.2	3.7	0	0
Legend										_	NOTE: all results in ppb	ts in ppb

<u>Legend</u> BDL =Below Detection Limit NA = Not Analyzed

Laboratories:
DPW - Nassau County DPW Special Projects Laboratory, Cedar Greek S.T.P., Wantagh, N.Y. Weston - Weston Labratories, Llorville, PA.

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

SAMPLE DATE LABORATORY ND NA ETHER NA	11/2/94 3/ DPW D	29/95	3/29/95	Н	11/2/94	3/31/05	3/31/95	A/18/94			
LABORATORY DPW	DPW	1							11/4/84	4/13/85	4/13/95
NA NA NA NA NA NA NA NA		_	Weston	MdO	DPW	DPW	Weston	DPW	DPW	DPW	Weston
INT BUTYL ETHER NA NNE ISULFIDE NA N		-									
INT BUTYL ETHER NA NA NA ISULFIDE NA	Y Z	ΑĀ	¥	NA	Ϋ́	۸	ΑN	Ā	AA	¥	Α̈́
NE NA ISULFIDE NA	¥	A	Ϋ́	AA	Ν	Ϋ́	ΑN	Ą	Ϋ́	Ϋ́	ΑN
ISULFIDE NA NA NA -2-PENTANONE NA BDL BDL BDL SNZENE BDL SNE BDL BDL BDL BDL BDL BDL BDL BD	¥	ΑA	Ϋ́	ΑA	ΝA	ΑN	Ϋ́	¥	Ϋ́	¥	NA
NA N	ΑN	A A	ΑN	ΑN	AN	ΑN	AN	¥ X	Ϋ́	Ϋ́	ΑN
2-PENTANONE NA BDL BDL BDL BDL BDL BDL STENE BDL BDL STENE BDL BDL STENE BDL	ΑN	Ϋ́	ΑN	Ϋ́	ΝΑ	ΝA	Ϋ́	¥	Ϋ́	Ą	Ϋ́Z
BDL BDL BDL STENE BDL BDL BDL BDL STENE BDL	Ϋ́	ΑN	ΑN	Ϋ́	ΥN	Ϋ́	ΑZ	ΑN	ΑN	Ϋ́	ΑN
BDL STENE BDL ST	BDL	1.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5	BDL
80L 80L 80L 80L 80L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.4	BDL
HE BDL BDL BDL BDL BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
80L 80L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
80L 80L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
, BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BOL
	BDL	BDL	AN	BDL	BDL	BDL	ΑN	BDL	BDL	BDL	NA
BDL	BDL	BDL	NA	BDL	BDL	BDL	AA	BDL	BDL	BDL	AN
5-TRIMETHYLBENZENE BDL	BDL	BDL	NA	BDL	BDL	BDL	NA	BDL	BDL	BDL	NA
IZENE BDL	BDL	BDL	ΑĀ	BDL	BDL	BDL	ΑN	BDL	BDL	BDL	NA
BDL	BDL	BDL	AA	BDL	BDL	BDL	NA	BDL	BDL	1.7	N A
BDL	BDL	BDL	NA	BDL	BD.	BDL	NA	BDL	BDL	BDL	ΑN
IZENE BOL	BDL	BDL	NA	BDL	BOL	BOL	NA	BDL	BDL	BDL	Ϋ́
BDL	BDL	BDL	NA	BDL	BCL	BDL	NA	BDL	BDL	BDL	NA
BDL	BDL	BDL	AA	BDL	BDL	BDL	NA	BDL	BDL	BDL	NA
BDL	BDL	BDL	BDL	ВОГ	BDL	BDL	BDL	BDL	BDL	BDL.	BDL
ZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	BDL	BDL	NA	BDL	1.4	BDL	Ϋ́	BDL	BDL	BDL.	NA
	2.6	BDL	BDL	BDL.	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	BDL	BDL	Ϋ́	ВОГ	ם	BDL	¥	BDL	BDL	BDL	Ν
	BDL	BDL	Ϋ́	BDL	8	BDL	Y Y	BDL	BDL	BDL	Ν
BOL	BDL	BDL	Y Y	BDL	BDL	BDL	Ϋ́	BDL	BDL	BDL	ΑN
1,2,3—TRICHLOROBENZENE BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
•			ļ								
TOTAL VOC (CONC.)	300.0	320.9	202.7	1.9	3.8	0.0	0.0	11.2	3.7	3.6	0.0

Legend BDL =Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
Weston — Weston Labratories, Llorwille, P.A.
DPW — Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y.

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

		DPW																																			
		DPW																																			
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	4/13/95	weston		BDL	BOL	BDL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	BDL	BDL	BDL	Ϋ́	BDL	BDL	BDL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	TOB	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDF	0
10C	4/13/95	DPW		BDL	BDL	BDL	BDL.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BOL	BDL	BOL	BDL	BDL	BDI	BDL	BDL	BDL	TOB	TOB	TQ8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0
BP-10C	11/4/84	DPW			BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL.	BDL	BDL	BDL	BDL	0.3	BDL	BDL	BDL	BDL	BDI.	BDL	BDL	BDL	BDL	0.3
	8/16/84	DPW		BDL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BOL	BDL	BOL	BDL	0.2	BDL	TOB	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2
WELL#	SAMPLE DATE	LABORATORY	COMPOUND	DICHLORODIFLUOROMETHANE	CHLOROMETHANE	VINYL CHLORIDE	BROMOMETHANE & CHLOROETHANE	TRICHLOROFLUOROMETHANE	1,1 - DICHLOROETHENE	METHYLENE CHLORIDE	1,2-T-DICHLOROETHENE	1,1 – DICHLOROETHANE	2,2-DICHLOROPROPANE & cis-1,2-DICHLOROETHENE	CHLOROFORM	BROMOCHLOROMETHANE	1,1,1-TRICHLOROETHANE	1,1 – DICHLOROPROPENE	CARBON TETRACHLORIDE	1,2-DICHLOROETHANE	TRICHLOROETHYLENE	1,2-DICHLOROPROPANE	BROMODICHLOROMETHANE & DIBROMOMETHANE	cis-1,3-DICHLOROPROPENE	trans-1,3-DICHLOROPROPENE	1,1,2—TRICHLOROETHANE	1,3-DICHLOROPROPANE	TETRACHLOROETHYLENE	DIBROMOCHLOROMETHANE	1,2-DIBROMOETHANE	CHLOROBENZENE	1,1,1,2-TETRACHLOROETHANE	BROMOFORM	1,1,2,2-TETRACHLOROETHANE	1,2,3-TRICHLOROPROPANE	BROMOBÉNZENE	1.2-DIBROMO-3-CHLOROPROPANE	

<u>Legend</u> BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW — Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston — Weston Laboratories, Lionville, PA

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

WELL#		21-12	3									
SAMPLE DATE	6/17/94	11/4/94	4/13/95	4/13/95								
LABORATORY	DPW	DPW	DPW	Weston	DPW							
COMPOUND						I 8						
ACETONE		AN	¥	ΑN	ΑN	ΑN	¥	ΑN	۷V	NA		Ϋ́
METHYL TERT BUTYL ETHER	AN	ΝA	AN	ΑN	ΑN	AN	NA	Ϋ́	Ϋ́	ΝA	Ϋ́	ΑN
2-BUTANONE	NA	NA	NA	ΑN								
CARBON DISULFIDE	Ϋ́	ΝA	Ϋ́	ΑN								
2-HEXANONE	ΑN	Ϋ́	¥	Ϋ́								
4-METHYL-2-PENTANONE	AN	ΑN	ΑN	ΑN								
BENZENE	BDL	BDL	1.3	BDL.								
TOLUENE	BDL	BDL	1.3	BDL								
CHLOROBENZENE	BDL	BDL	BDL	BDL								
ETHYLBENZENE	BDL	BDL	1.1	BDL								
M, P-XYLENE	BDL	BDL	1.5	BDL								
O-XYLENE	BDF	BDL	BDL	BDL								
STYRENE	BDL	BDL	3.3	ΝA								
ISOPROPYLBENZENE	BDL	TOB	1.5	ΝA								
n-PROPY-&BROMO-&1,3,5-TRIMETHYLBENZENE	BDL	BDL	3.7	Ϋ́Α								
1,3,5—TRIMETHYLBENZENE	BDL	TOB	BOL	NA								
4-CHLOROTOLUENE	BDL	TOB	BDL	۷A								
tert-BUTYLBENZENE	BDL	708	BDL	NA								
1,2,4—TRIMETHYLBENZENE	BDL	BOL	1.3	NA								
8ec-BUTYLBENZENE	BDL	TGB	1.6	NA								
P-ISOPROPYLTOLUENE	BDL	BDL	BDF	NA								
1,3-DICHLOROBENZENE	BDL	BDF	1.2	BDL								
1,4-DICHLOROBENZENE	BOL	BOL	BOL	BDL								
N-BUTYLBENZENE	BOL	BDL	TOB	NA								
1,2-DICHLOROBENZENE	BDL	BDL	TOB	BDL								
1,2,4-TRICHLOROBENZENE	BDL	BDL	BDL	NA								
HEXACHLOROBUTADIENE	BDL	BDL	BDF	AA								
NAPTHALENE	BDL	BDL	BDL	NA NA								
1,2,3-TRICHLOROBENZENE	BDL	B 01.	BDL	BDL								
TOTAL VOC (CONC.)	0.2	0.3	17.8	BDL								

Legend BDL = Below Detection Limit NA = Not Analyzed

Laboratories:

DPW - Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y.
Weston - Weston Laboratories, Llowille, PA

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GROUNDWATER SAMPLING RESULT COMPARISON FTC - REMEDIAL DESIGN

QUARTERLY

SAMPLE DATE JANIAB SAVIAB AVIABA COMPLOANDER DEV DEV DEV COMPLOANDER BDL BDL BDL CHORDORIC LORDORIC LANGE BDL BDL BDL CHORDORIC LORDORIC LANGE BDL BDL BDL CHORDORIC LANGE CALLORORIC LANGE BDL BDL BDL TATALORORIC LANGE BDL BDL BDL BDL TATALORORIC LANGE BDL BDL BDL BDL TATALORORIC LANGE BDL BDL BDL BDL TATALOROR CHANGE BDL BDL BDL BDL TATALORIC CHANGE BDL BDL	PLE DATE 321006 1070W	WELL#	BP-2B	BP-12	W-23
DPW DPW DPW BDL BDL BDL	ABONATORIY DPW ABONALORIY DPW ABONALORIY DPW BDL	SAMPLE DATE	3/31/95	3/31/85	4/18/95
BDL BDL BDL	DETAIL DETAIL BOL B	LABORATORY	DPW	DPW	DPW
BDL BDL BDL	ETHANE BOL BOL BOL ILOPOCETHANE BOL BOL BOL ILOPOCETHANE BOL BOL BOL ILOPOCETHANE BOL BOL BOL ENE BOL BOL BOL ENE BOL BOL BOL ENE BOL BOL BOL ANE BOL BOL BOL NE BOL BOL BOL NAE BOL BOL BOL BOL BOL <td< td=""><td>COMPOUND</td><td></td><td></td><td></td></td<>	COMPOUND			
80. 80. <td> BDL BDL</td> <td>ICHLORODIFLUOROMETHANE</td> <td>PDF BDF</td> <td>BDL</td> <td>BDL</td>	BDL BDL	ICHLORODIFLUOROMETHANE	PDF BDF	BDL	BDL
3.8 80L 80L <td> NOTIONOCTHAINE BDL BDL </td> <td>HLOROMETHANE</td> <td></td> <td>80.</td> <td>BDL</td>	NOTIONOCTHAINE BDL	HLOROMETHANE		80.	BDL
BDL BDL BDL	Componentiation	INYL CHLORIDE	3.8	BDL	BDI_
8DL 8DL <td>ETHANE ENE ENE ENE ENE ENE ENE ENE ENE ENE</td> <td>IROMOMETHANE & CHLOROETHANE</td> <td>BDL BDL</td> <td>BDL</td> <td>BOL</td>	ETHANE ENE ENE ENE ENE ENE ENE ENE ENE ENE	IROMOMETHANE & CHLOROETHANE	BDL BDL	BDL	BOL
8DL 8DL 8DL	BDL BDL	RICHLOROFLUOROMETHANE	BDI.	801	BDL
BOL BOL BOL	ENER BOL	1-DICHLOROETHENE	BDI.	BDL	108
BDL	ENER BOL BOL BOL RE & cie-1.2-DICHLOROETHENE 7.1 BOL BOL NEE BOL BOL BOL ANE BOL BOL BOL ANE BOL BOL BOL ANE BOL BOL BOL ANE BOL BOL BOL BOL BOL BOL BOL NE BOL BOL BOL NE BOL BOL BOL NAME BOL BOL BOL BOL NAME BOL BOL BOL BOL NAME BOL BOL BOL BOL SECHANIE BOL BOL BOL <td>(ETHYLENE CHLORIDE</td> <td>BDIL</td> <td>BOL</td> <td>108</td>	(ETHYLENE CHLORIDE	BDIL	BOL	108
1.1 801. 8	The color of the	,2-T-DICHLOROETHENE	BOL	80.	BDI
7.1 BDL BDL BDL BDL BDL	NE & cie-1,2-DICHLOROETHENE 7.1 BDL 2.5 ANE BDL BDL BDL BDL BDL BDL BDL BDL BDL NE BDL BDL BDL BDL NAE BDL	1-DICHLOROETHANE		108 108	
BDL	ANE BDL BDL BDL BDL ANE BDL	,2-DICHLOROPROPANE & cis-1,2-DICHLOROETHENE		BDL	2.5
BDL	AVE BDL BDL BDL AVE BDL BDL BDL NIE BDL BDL BDL NE BDL BDL BDL BDL BDL BDL BDL PANER & DIBROMOMETHANE BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL BDL <td< td=""><td>HLOROFORM</td><td>BDL</td><td>BDL</td><td></td></td<>	HLOROFORM	BDL	BDL	
BDL	AME BDL BDL BDL NE BDL BDL BDL NE BDL BDL BDL E BDL BDL BDL NE BDL BDL BDL NA BDL BDL BDL	ROMOCHLOROMETHANE	BOL	BDL	BDL
BDL	NE BDL	1,1-TRICHLOROETHANE	BDL	- TOB	BDI.
BDL	DE BDL	1 DICHLOROPROPENE	BDL	BDL	BDL
BOL BOL BOL BDL	EE BDL BDL BDL BDL NE BDL BDL BDL BDL HANE<& DIBROMOMETHANE	ARBON TETRACHLORIDE	BDL	BDL	108
BDL BDL BDL BDL BDL K DIBROMOMETHANE BDL BDL BDL BDL IE BDL BDL BDL BDL IE BDL BDL BDL BDL BDL BDL BDL BDL BDL ROMNE BDL BDL BDL BDL ROMNE BDL BDL BDL BDL ROMNE BDL BDL BDL BDL	NE BDL BDL BDL NANE BDL BDL BDL PROPENE BDL BDL BDL PROPENE BDL BDL BDL ANE BDL BDL BDL ANE BDL BDL BDL NE BDL BDL BDL NE BDL BDL BDL HANE BDL BDL BDL SETHANE BDL BDL BDL BDL BDL BDL	,2-DICHLOROETHANE	BOL	108	BD(
k DIBROMOMETHANE BDL	NE BDL	RICHLOROETHYLENE	BDL	801	BOL
E	HANE & DIBROMOMETHANE BDL	,2-DICHLOROPROPANE	TO8	108	BD[
BDL	OPENE BDL BDL </td <td>ROMODICHLOROMETHANE & DIBROMOMETHANE</td> <td>BDL</td> <td>108</td> <td>80[</td>	ROMODICHLOROMETHANE & DIBROMOMETHANE	BDL	108	80[
BOL	RADE BDL BDL BDL ANE BDL BDL BDL NE BDL BDL BDL NE BDL BDL BDL ENHANE BDL BDL BDL SETHANE BDL BDL BDL DETHANE BDL BDL BDL BDL BDL <t< td=""><td>is -1,3-DiCHLOROPROPENE</td><td>BDL BDL</td><td>BDL BDL</td><td>BDL</td></t<>	is -1,3-DiCHLOROPROPENE	BDL BDL	BDL BDL	BDL
BDL	ANE BDL BDL <td>ans-1,3-DICHLOROPROPENE</td> <td>BDL</td> <td>BDL</td> <td>BDL</td>	ans-1,3-DICHLOROPROPENE	BDL	BDL	BDL
BOL	NE BDL BDL BDL BDL FANE BDL BDL BDL BDL HANE BDL BDL BDL BDL SETHANE BDL BDL BDL BDL SETHANE BDL BDL BDL BDL PANE BDL BDL BDL BDL LOROPROPANE BDL BDL BDL BDL LOROPROPANE BDL BDL BDL BDL	,1,2—TRICHLOROETHANE	BDL	BDL	BDL
BDL	ENE BDL BDL BDL HANE BDL BDL BDL SETHANE BDL BDL BDL PANE BDL BDL BDL PANE BDL BDL BDL LOROPROPANE BDL BDL BDL 12 BDL BDL BDL	,3-DICHLOROPROPANE	BDL	DDF BDF	108
BDL	HANE BDL BDL BDL SETHANE BDL BDL BDL DETHANE BDL BDL BDL PANE BDL BDL BDL LOROPROPANE BDL BDL BDL LOROPROPANE BDL BDL BDL LOROPROPANE BDL BDL BDL LOROPROPANE BDL BDL BDL	ETRACHLOROETHYLENE	BDL	BDL	BDL
BOL	SETHANE BDL BDL BDL DETHANE BDL BDL BDL DETHANE BDL BDL BDL PANE BDL BDL BDL LOROPROPANE BDL BDL BDL LOROPROPANE BDL BDL BDL LOROPROPANE BDL BDL BDL	NIBROMOCHLOROMETHANE	BDL BDL	708	BDL
BDL	DETHANE BDL BDL BDL DETHANE BDL BDL BDL DETHANE BDL BDL BDL IPANE BDL BDL BDL LOROPROPANE BDL BDL BDL LOROPROPANE BDL BDL BDL LOROPROPANE BDL BDL BDL	,2-DIBROMOETHANE	l BOL	708	108
BDL	DETHANE BDL	HIOROBENZENE		TOB I	80[
BDL	DETHANE BDL BDL BDL BDL PANE BDL BDL BDL BDL LOROPROPANE BDL BDL BDL BDL 12 0 A11 A11	1,1,2-TETRACHLOROETHANE	TOS I	709	BD[
BDL	DETHANE BDL BDL BDL PANE BDL BDL BDL LOROPROPANE BDL BDL BDL 12 0 4.1	SROMOFORM	709	801	BDL
BDL	PANE BDL BDL <td>,1,2,2-TETRACHLOROETHANE</td> <td>l BDL </td> <td>BDL</td> <td>8D[</td>	,1,2,2-TETRACHLOROETHANE	l BDL	BDL	8D[
-CHLOROPROPANE BDL	LOROPROPANE BDL BDL BDL 12 0 4.1	,2,3-TRICHLOROPROPANE	TOB I	108	BD[
12 BDL BDL BDL BDL BDL	LOROPROPANE BDL BDL BDL BDL 4.1	SPOMOBENZENE	I BDL	708	BDL
0	12 0 4.1	,2-DIBROMO-3-CHLOROPROPANE	l BDL	BDL	BDL.
			12	0	17

Legend BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW - Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston - Weston Laboratories, Liomille, PA

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GROUNDWATER SAMPLING RESULT COMPARISON QUARTERLY

WELL#	8	BP-2B	BP-12		W-23	23	
SAMPLE DATE	3/31/85		3/31/85	 4/18/95			
LABORATORY	DPW		DPW	DPW	DPW	DPW	DPW
COMP							
ACETONE	NA		NA	NA	*		X
METHYL TERT BUTYL ETHER	NA		ΨZ	Ą			
2-BUTANONE	NA NA		AN	ĄZ			
CARBON DISULFIDE	NA		NA	Ϋ́			
2-HEXANONE	AN		NA	ĄZ			
4-METHYL-2-PENTANONE	NA		NA	Ą			
BENZENE	3.2		BOL	BDL			
TOLUENE	BDI		BDL	BDL			
CHLOROBENZENE	BDL		BDL	1.3			
ETHYLBENZENE	1.5		BDL	BDL			
M, P-XYLENE	BDL		BDL	BDL			
O-XYLENE	BDL		BDL	BDL			
STYRENE	BDL		BDL	BOL			
ISOPROPYLBENZENE	BDL		BDL	BDL			
n-PROPY-&BROMO-&1,3,5-TRIMETHYLBENZENE	BDL		BDL	BDL			
1,3,5-TRIMETHYLBENZENE	BDL		BDL	BDL			
4CHLOROTOLUENE	BDL		BDL	BDL			
tert-BUTYLBENZENE	BDL		BDL	BDL			
1,2,4—TRIMETHYLBENZENE	TOB		BDL	BDF			
sec-BUTYLBENZENE	BDL		BDL	BDL			
P-ISOPROPYLTOLUENE	BOL		BDL	BDL			
1,3-DICHLOROBENZENE	BDL.		BDL	1.1			
1,4-DICHLOROBENZENE	2.7		BDL	3.3			
N-BUTYLBENZENE	BDL		BDL	BDL			
1,2-DICHLOROBENZENE	BDL.		BDL	BDL			
1,2,4-TRICHLOROBENZENE	BOL		BDL	BDL			
HEXACHLOROBUTADIENE	BDL		BDL	BDL.			
NAPTHALENE	BDL		BDL	BDI.			
1,2,3-TRICHLOROBENZENE	BDL		BDL	BOL			
TOTAL VOC. CONC.)	10.4			ao			
TOTAL VOC (CORC.)	r.		25	0.0			

Legend BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW — Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston — Weston Laboratories, Llorwille,PA

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

W-31				***************************************																																		NOTE: all results in ppb
	4/17/85	DPW		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL.	BDL	BDL	BDL	BDL	BDI.	BD.	BDL	2.2		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.2	
W-4B				_																																		
	4/18/85	DPW		BDL	BDL	BDI.	BDL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	BDL	BDL	BDI.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0	
W-4A																																						
	4/18/85	DPW		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL.	E E	BDL	BDL	BOL	BDL	B DL	BDL	BD BD	BDL	BDL	BDL	BDL	BDL	BDL	BOL	BDL	BDL.	BDL	B DL	BDL	BDF	BDL	B	BD L	BD L	0	
WELL#	SAMPLE DATE	LABORATORY	COMPOUND	DICHLORODIFLUOROMETHANE	CHLOROMETHANE	VINYL CHLORIDE	BROMOMETHANE & CHLOROETHANE	TRICHLOROFLUOROMETHANE	1,1 - DICHLOROETHENE	METHYLENE CHLORIDE	1,2-T-DICHLOROETHENE	1,1 - DICHLOROETHANE	2,2-DICHLOROPROPANE & cis-1,2-DICHLOROETHENE	CHLOROFORM	BROMOCHLOROMETHANE	1,1,1-TRICHLOROETHANE	1,1 - DICHLOROPROPENE	CARBON TETRACHLORIDE	1,2-DICHLOROETHANE	TRICHLOROETHYLENE	1,2-DICHLOROPROPANE	BROMODICHLOROMETHANE & DIBROMOMETHANE	cis-1,3-DICHLOROPROPENE	trans-1,3-DICHLOROPROPENE	1,1,2-TRICHLOROETHANE	1,3-DICHLOROPROPANE	TETRACHLOROETHYLENE	DIBROMOCHLOROMETHANE	1,2-DIBROMOETHANE	CHLOROBENZENE	1,1,1,2—TETRACHLOROETHANE	BROMOFORM	1,1,2,2-TETRACHLOROETHANE	1,2,3—TRICHLOROPROPANE	BROMOBENZENE	1,2-DIBROMO-3-CHLOROPROPANE		Legend

Legend BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW - Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston - Weston Laboratories, Liomille, PA

<u>FTC – REMEDIAL DESIGN</u> GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

WELL#	W-4A	W4B	3	W-31
SAMPLE DATE	4/18/85	. 4/18/95	4/17/95	
LABORATORY	DPW	DPW	DPW	
COMPOUND				
ACETONE	NA	NA	NA	
METHYL TERT BUTYL ETHER	NA	NA	NA	
2-BUTANONE	NA	NA	AN	
CARBON DISULFIDE	NA	NA	AN	
2-HEXANONE	NA	AN	AN	
4-METHYL-2-PENTANONE	NA	NA	NA AN	
BENZENE	BDL	BDL	8.0	
TOLUENE	BOL	BDL	15.8	
CHLOROBENZENE	BOL	2.1	BDL	
ETHYLBENZENE	2.2	BDL	BDL	
M, P-XYLENE	2.1	BDL	496.0	
O-XYLENE	2.5	BDL	296.0	
STYRENE	TOB	BDL	19.3	
ISOPROPYLBENZENE	BDL	BDL	47.0	
n-PROPY-&BROMO-&1,3,5-TRIMETHYLBENZENE	1.8	BDL	370.0	
1,3,5-TRIMETHYLBENZENE	BDL	BDI.	17.9	
4-CHLOROTOLUENE	1.0	BDL	BDL	
tert-BUTYLBENZENE	BDL	BDL	81.4	
1,2,4—TRIMETHYLBENZENE	3.6	BOL	266.0	
sec-BUTYLBENZENE	BDL	BDL	498.0	
P-ISOPROPYLTOLLIENE	BDL	BDL	13.4	
1,3-DICHLOROBENZENE	BDL	1.3	BDL	
1,4-DICHLOROBENZENE	BDL	0.9	BDL	
N-BUTYLBENZENE	BDL	BDL	18.2	
1,2-DICHLOROBENZENE	BDL	BDL	BDL	
1,2,4-TRICHLOROBENZENE	BDL	BOL	BDL	
HEXACHLOROBUTADIENE	BDL	BDL	BDL	
NAPTHALENE	BDL	BDL	BDL	
1,2,3—TRICHLOROBENZENE	BDL	BOL	BDL	
TOTAL VOC (CONC.)	100	0	0.4470	
IOIAL VOC (CONC.)	2.61	tro	2747.0	

<u>Legend</u> BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW — Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston — Weston Laboratories, Llonville,PA

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

W-7D																																					NOTE: all results in ppb
	4/12/95	DPW		BDL	BDL	BDL	BOL	8DL	BD	BDL	BDL	BD(0.7	0.3	BDL	90	BD.	108	- BDC	BDI.	B D/L	- GB	BDL	BDI.	BDL	BDI.	2.0	BDL	BDL	BDL		BDL	BDL	BOL	BDL	BDI.	6
W-7C																																					
	4/12/85	DPW		BDL	BDL	BDL	BOL	BDL	B	BDL	BD_	108 100	6.8	5.6	BDL	108	BDL	BDL	BDL	1.4	BDF.	BD.	BOL	BDL	BOL	BDL	3.9	BDL	BDL	BDL	0.4	BDL	BDI	BDL	BDL	BDL	15.1
W-7B																																					
	4/12/95	MdQ		BOL	BDL	BDL	BDL	BDL.	900	8 01	BOL	BOL	6.0	0.5	BDL	BDL	BDL	BD.	80L	BDL.	8 0F	80F	BDL	BD L	BDF	BDL	BDL	l BDL	BDL	BDL	. TOB	BDL	BDI	B0L	BDL	BDL	7
WELL#	SAMPLE DATE	LABORATORY	COMPOUND	DICHLORODIFLUOROMETHANE	CHLOROMETHANE	VINYL CHLORIDE	BROMOMETHANE & CHLOROETHANE	TRICHLOROFLUOROMETHANE	1,1-DICHLOROETHENE	METHYLENE CHLORIDE	1,2-T-DICHLOROETHENE	1,1 - DICHLOROETHANE	2,2-DICHLOROPROPANE & cis-1,2-DICHLOROETHENE	CHLOROFORM	BROMOCHLOROMETHANE	1.1.1 – TRICHLOROETHANE	1.1 - DICHLOROPROPENE	CARBON TETRACHLORIDE	1.2-DICHLOROETHANE	TRICHLOROETHMLENE	1.2-DICHLOROPROPANE	BROMODICHLOROMETHANE & DIBROMOMETHANE	cis-1,3-DICHLOROPROPENE	trans-1,3-DICHLOROPROPENE	1,1,2-TRICHLOROETHANE	1,3-DICHLOROPROPANE	TETRACHLOROETHYLENE	DIBROMOCHLOROMETHANE	1,2-DIBROMOETHANE	CHLOROBENZENE	1,1,1,2-TETRACHLOROETHANE	BROMOFORM	1,1,2,2-TETRACHLOROETHANE	1.2.3—TRICHLOROPROPANE	BROMOBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	Lepend

<u>Legend</u> BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW - Nassau County DPW Special Projecte Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston - Weston Laboratories, Llomille,PA

<u>FTC – REMEDIAL DESIGN</u> <u>GROUNDWATER SAMPLING RESULT COMPARISON</u>

QUARTERLY

W-7D			_																														
		DPW		¥	Ą	ΑN	AN	ΑN	AN.	BDL	BDL	BDL	BD,	801	108	80F	90	BDL	BD.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	8DL	BDL	BDL	BDL	3.0
W-7C	4/12/95	DPW		AN	NA	NA	NA	NA	NA	5.6	BDI.	BDL	1.0	BOL	BDI.	2.7	1.6	28.3	BDL	BOL	8.8	BDL	BDL	BDL	BDL	1.4	1.4	1.4	23.0	BDL	BDL	BDL	87.2
W-7B	2			AN							1.0					2.2	1.2	31.0			9.9		1.0		1.1	1.1		2.3	24.1		10.0		84.1
	E DATE 4/12/85	ATORY DPW		NA	AN	NA	AN	AN	AN.			BOL	HOR	BOL	BDL				BOL	BOL		BDL		BDL			BDL		2	BDL	1	BDL	8
WELL#	SAMPLE DATE	LABORATORY	COMPOUND	ACETONE	METHYL TERT BUTYL ETHER	2-BUTANONE	CARBON DISULFIDE	2-HEXANONE	4-METHYL-2-PENTANONE	BENZENE	TOLUENE	CHLOROBENZENE	ETHYLBENZENE	M, P-XYLENE	O-XYLENE	STYRENE	ISOPROPYLBENZENE	n-PROPY-&BROMO-&1,3,5-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	4-CHLOROTOLUENE	tert—BUTYLBENZENE	1,2,4-TRIMETHYLBENZENE	sec-BUTYLBENZENE	P-ISOPROPYLTOLUENE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	N-BUTYLBENZENE	1,2-DICHLOROBENZENE	1,2,4-TRICHLOROBENZENE	HEXACHLOROBUTADIENE	NAPTHALENE	1,2,3-TRICHLOROBENZENE	TOTAL VOC (CONC.)

<u>Legend</u> BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW — Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston — Weston Laboratories, Llorville,PA

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

W-32	4/18/95	DPW		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BOL	BOL	BDL	BOL	BDL	BOL	BOL	BDL	BDL	BDL	BDI	BOL	BDL	BOL	BDL	BDI.	801	BDL.	BOL	BDL	BDL	BOL	BDL	BDL	
W-9B	4/20/95	DPW		B0L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BD[BDL	BDL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	BOL		BOL	BDL	BDL	BDL	BOL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0
W-9A	4/20/85	DPW		BDL	BDL	BDI.	BOL	BDL	BDL	BDL	BOL	BDL		BDL	BDL	1.1	BDL	BDL	BDL	BDL	BDL	BOL	BOL	BOL	BDL	BDL	BDL	BOL	BOL	BDL	BDL	BDL	BDL	BDI.	BDL	BOL	
WELL#	SAMPLE DATE	LABORATORY	COMPOUND	DICHLORODIFLUOROMETHANE	CHLOROMETHANE	VINYLCHLORIDE	BROMOMETHANE & CHLOROETHANE	TRICHLOROFLUOROMETHANE	1,1-DICHLOROETHENE	METHYLENE CHLORIDE	1,2-T-DICHLOROETHENE	1,1-DICHLOROETHANE	2,2-DICHLOROPROPANE & cis-1,2-DICHLOROETHENE	CHLOROFORM	BROMOCHLOROMETHANE	1,1,1 - TRICHLOROETHANE	1,1-DICHLOROPROPENE	CARBON TETRACHLORIDE	1,2-DICHLOROETHANE	TRICHLOROETHYLENE	1,2-DICHLOROPROPANE	BROMODICHLOROMETHANE & DIBROMOMETHANE	cis - 1,3 - DICHLOROPROPENE	trans-1,3-DICHLOROPROPENE	1,1,2-TRICHLOROETHANE	1,3-DICHLOROPROPANE	TETRACHLOROETHYLENE	DIBROMOCHLOROMETHANE	1,2-DIBROMOETHANE	CHLOROBENZENE	1,1,1,2-TETRACHLOROETHANE	BROMOFORM	1,1,2,2—TETRACHLOROETHANE	1,2,3-TRICHLOROPROPANE	BROMOBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	

Legend BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW — Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y.
Weston — Weston Laboratories, Lionville,PA

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GROUNDWATER SAMPLING RESULT COMPARISON QUARTERLY

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ZENE	BDL	BDL.
N-BUTYLBENZENE BDL	108 L	9.6
1,2-DICHLOROBENZENE BDL	BDL	BDL
1,2,4—TRICHLOROBENZENE BDL	BOL	BOL
	BDL	BOL
NAPTHALENE	80.	BDL
1,2,3—TRICHLOROBENZENE BDL	BDL	BDL
TOTAL VOC (CONC.)	0.0	1012.5

<u>Legend</u> BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratorles:</u>
DPW - Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston - Weston Laboratorles, Llorwille,PA

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GROUNDWATER SAMPLING RESULT COMPARISON

QUARTERLY

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<u>Legend</u> BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u>
DPW - Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston -- Weston Laboratories, Lionville,PA

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GROUNDWATER SAMPLING RESULT COMPARISON FTC - REMEDIAL DESIGN

QUARTERLY

NA	WELL#	W-14A	W-14B	48	W-35	_
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	1,2,3-TRICHLOROBENZENE	BDL	BDI.		BDL	
	TOTAL VOC (CONC.)	0.0	0.0		8638.0	

Legend BDL = Below Detection Limit NA = Not Analyzed

<u>Laboratories:</u> DPW — Nassau County DPW Special Projects Laboratory, Cedar Creek S.T.P., Wantagh, N.Y. Weston — Weston Laboratories, Llonville,PA

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COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

March 24, 1995

Camp, Dresser & McKee 100 Crossways Park North Woodbury, New York 11797

Attn: Michael A. Memoli, P.E.

Senior Associate

Re: Fireman's Training Center Remediation Project

Remedial Design Budget Revision

Gentlemen:

The County has reviewed your March 15, 1995 request for reallocating funds from bioventing to the groundwater treatment design for the addition of bid services and recommendation of award.

Upon review the County will give authorization to reallocate \$43,000 from Bioventing to Groundwater Treatment.

If you have any questions, please contact Peter Witkowski, Director of Hazardous Waste Services, at 571-9600.

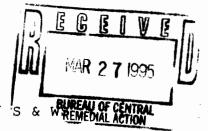
Very truly yours,

John M. Waltz, P.E. Commissioner of Public Works

JMW:KGA:tj

cc: James A. Oliva, Acting Head, Division of S & W

Mr. George Heitzman, NYSDEC



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 50 Wolf Road, Albany, New York 12233



File 15 1995

130042

Langdon Mars Commissioner

Mr. Jeff Fullmer Co-Chair L.I. Citizens Advisory Committee on Hazardous Waste 550 Smithtown By-Pass Suite 205 Smithtown, NY 11787

Dear Mr. Fullmer:

RE: Fire Training Centers on Long Island

Thank you for your letter dated November 28, 1994. I apologize for the delay in responding to you. The Division of Hazardous Waste Remediation does not require the monitoring or reporting of Fire Training Centers that are not currently on the Registry.

If any of these sites have contamination problems we would most likely be made aware of them through the Suffolk and Nassau County Department of Health.

Thank you for your concern. If you have any questions please feel free to call me at (518) 457-0639.

Sincerely,
Daniel J-Easter for

John B. Swartwout, P.E.

Chief

Eastern Investigation Section
Bureau of Hazardous Site Control

Division of Hazardous Waste Remediation

cc:

Sy Robbins

L. Lutzker

J. Epstein

bcc: A. Shah

J. Swartwout

E. Zuk

EZ/ma



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

January 24, 1995

Camp, Dresser & McKee 100 Crossways Park North Woodbury, New York 11797

Attn: Michael A. Memoli, P.E.

Senior Associate

Re: Fireman's Training Center Remediation Project

> Remedial Design Budget Revision

Gentlemen:

The County has reviewed your November 9, 1994 request for reallocating funds from bioventing to the groundwater treatment design for the addition of the sub-agreement and bid services.

Upon review the County will give authorization to reallocate \$25,000 from Bioventing to Groundwater Treatment.

If you have any questions, please contact Peter Witkowski, Director of Hazardous Waste Services, at 571-9600.

Very truly yours,

William allette PE.

John M. Waltz, P.E. Commissioner of Public Works

JMW: KGA: tj

cc: James A. Oliva, Acting Head, Division of S & WS

✓Mr. George Heitzman, NYSDEC

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COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

November 18, 1994

Camp, Dresser & McKee 100 Crossways Park North Woodbury, New York 11797

Attn: Michael A. Memoli, P.E.

Senior Associate

Re: Fireman's Training Center Remediation Project

Remedial Design Budget Revision

Gentlemen:

The County has reviewed your November 9, 1994 request for reallocating funds from bioventing to the groundwater treatment design for the fire protection design.

Upon review the County will give authorization to reallocate 513,440 from Bioventing to Groundwater Treatment.

If you have any questions, please contact Peter Witkowski, Director of Hazardous Waste Services, at 571-9600.

Wery truly yours, Millian alle the PE

John M. Waltz, P.E.

Commissioner of Public Works

JMW: KGA: tj

cc: James A. Oliva, Acting Head, Division of S & WS

Mr. George Heitzman, NYSDEC

New York State Department of Environmental Conservation

MEMORANDUM

TO:

FROM:

Robert J. Cozzy, Municipal Projects Section
Gerald J. Rider, Jr., Chief, Operation, Maintenance & Support Section

MLG for SM

114/3 4

SUBJECT:

DATE:

NOV 1 4 1994

The Operation, Maintenance & Support Section has completed its review of the Draft Monitoring Plan for the above-referenced site and offers the following comments:

- Section 2.2.1, <u>Treatment Facility</u> Copies of the Discharge Monitoring Reports are to be 1. included in the reports submitted to the State.
- 2. Section 3, Monitoring Network - Departmental approval will be required prior to adjusting sampling frequency.
- 3. Section 3.2.1, Treatment Facility - We recommend that additional treatment of the effluent be considered, such as carbon adsorption.
- Section 3.4, <u>Hydraulic Controls</u> Have sufficient upgradient piezometers been installed to 4. determine the extent of mounding in the recharge area, and the effect of mounding, if any, on local groundwater flow patterns?
- 5. Section 3.5, <u>Air Emissions</u> - The EPA requires that air emissions from air strippers be treated. We believe that the Nassau County Fire Training Center site is not exempt from this requirement.
- 6. Section 4.6, Reporting - Appropriate field data should be recorded in field data logs and included in the reports submitted to the State.
- 7. Section 5.7, Health and Safety Plan - The referenced Health and Safety Plan is missing from Appendix A.
- 8. Will the treatment system have the flexibility or capacity to accept additional contaminant loading should the need arise? Will additional loading impact treatment efficiency and air and water discharge characteristics, wherein it may contravene the established performance criteria?

If you have any questions, please contact Ronnie Lee, of my staff, at 7-0927.

cc:

R. Lee

A. Shah, Reg. 1

a:ncftc.wp6:RL:GR:et

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COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

October 20, 1994

Camp Dresser & McKee 100 Crossways Park West Woodbury, New York 11797

Attn: Michael A. Memoli, P.E.

Senior Associate

Re: Fireman's Training Center

Remedial Design, Project No. 81021

Reallocation of Costs

Gentlemen:

The County has reviewed your September 14, 1994 correspondence requesting a reallocation of funds between Bioventing and Groundwater Treatment work items for the above referenced project.

Please find below your cost breakdown as presented in your September 14, 1994 correspondence with the County response following.

1. CDM Labor Costs

	Re	<u>eason</u>	<u>Amount</u>
CDM	-	Unanticipated Revisions to design flows.	\$8,000
County	-	Approved total of \$8,000 as outlined in your previous 5/27/94 correspondence.	
CDM	-	Unanticipated revisions to building location and piping routes.	\$5,500
County	-	Disapproved total of \$5,500. Preliminary work could have been done so that piping was not rerouted.	

Camp Dresser & McKee October 20, 1994

Page Two

Re: Fireman's Training Center Remedial Design Reallocation of Costs

	<u>R</u> 6	<u>eason</u>	Amount
CDM	-	Unanticipated Revisions to design contaminant concentrations.	\$6,400
County	-	Approved total of \$6,400 as outlined in your previous 6/13/94 correspondence.	
CDM	-	Additional air modeling and reporting requirements to justify air emission control waiver following late changes in building location, design flows and design concentrations.	\$5,000
County	-	Disapproved total of \$5,000. This work was included in your 6/13/94 correspondence.	
CDM	-	Additional groundwater modeling due to revisions in flow and contaminant concentration.	\$7,000
County	-	Approved total of \$7,000. This work was not outlined in neither your 6/13/94 nor 5/27/94 correspondence, but was completed.	
CDM	-	Addition of specs for pre-fabricated enclosures for electrical equipment in Bethpage Park.	\$2,000
County	-	Approved total of \$2,000. Work is required to meet the requirements of Bethpage Park.	
CDM	-	Overlapping Costs	\$32,790
County	-	Approved	

Camp Dresser & McKee October 20, 1994 Page Three

Re: Fireman's Training Center Remedial Design

Reallocation of Costs

2. Subconsultant Costs

	<u>R</u>	<u>eason</u>	Amount
CDM	-	Addition of sheeting design	\$8,500
County	-	Approved total of \$8,500 as requested in your 9/12/94 correspondence.	
CDM	-	Additional surveying costs due to unanticipated revisions in extraction well locations in Park, and unavailability of accurate design drawings of existing recharge basin.	\$7,800
County	-	Disapproved total of \$7,800. CDM was aware of information that existed on the recharge basin during the proposal process. In addition, certain work proposed for the basin was never completed due to standing water in basin. The use of the County's GIS maps saved a considerable amount of surveying that would have otherwise been required.	
CDM	-	CMB building demolition design.	\$2,000
County	-	Approved total of \$2,000.	
CDM	-	Use of air modeling consultants to support additional modeling and reporting due to revisions in building location, design flows, and design concentrations.	\$3,600
County	-	Approved total of \$3,600.	

Camp Dresser & McKee October 20, 1994

Page Four

Re: Fireman's Training Center Remedial Design

Reallocation of Costs

3. Direct Costs

CDM - Additional Cambridge based function \$3,900 group travel expenses, reproduction costs, drawing, print and computer costs due to all above listed unanticipated design changes.

County - Approved total of \$3,900.

CDM - Additional air modeling travel expenses \$1,500 related to Albany meeting with NYSDEC air modeling group.

County - Approved total of \$1,500.

In summary, the County approves the reallocation of \$75,690 from the Bioventing Task to the Groundwater Treatment Task. The reallocation does not increase the lump sum cost ceiling of your design agreement with the County, S81021C, dated October 19, 1993.

Should you have any questions, please contact Peter J. Witkowski, Director of the Hazardous Waste Services Unit, at 571-9600.

Very truly yours,

John M. Waltz, P.E.

Commissioner of Public Works

JMW: KGA: jb

cc: James A. Oliva, Acting Head, Division of Sanitation

and Water Supply

Mr. George Heitzman, NYSDEC /

bcc: Walter Henneberger

DEPARTMENT OF PUBLIC WORKS

Division of Sanitation and Water Supply 1 West Street, Mineola, New York 11501

O: Georg	e Heitzman	Date: October 11, 1994
New Y	ork State	PROJECT: Fireman's Training Centre
Depar	tment of Environme	ental Remedial Design
Conservation		CONTRACT:
ntlemen:		
We are	sending you the followin Herewith Under separat	
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		Supervisors
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RESOLUTION NO. 661-1994

Authorizing the Department of Public Works to include in its specification for provision of required groundwater pollution treatment systems for the State Consent Order mandated environmental remediation project at the Nassau County Fire Service Academy in Old Bethpage the use of a specific proprietary biologic treatment system in Project No. 81021.

Passed by Board of Supervisors on SEP 10 1004 votes for 108; votes against, none. Became a Resolution on SEP 10 1004 with the approval of the Deputy County Executive Acting for the County Executive.

WHEREAS, the County of Nassau has entered into an Order on Consent with the State of New York, Departments of Law and Environmental Conservation, with respect to an inactive hazardous waste disposal site known as the "Nassau County Fire Service Academy" in Old Bethpage, Town of Oyster Bay, Nassau County (herein the "Site"); and

WHEREAS, the aforesaid Order on Consent mandates that the County develop and implement a remedial program designed to abate and eliminate the threat to the public health and environment at the Site and its off-site environs; and

WHEREAS, a three month pilot study has been performed at the Fire Service Academy using the Envirox GAC Fluidized Bed System and results have demonstrated a 99% destruction of groundwater pollutants; and

WHEREAS, the New York State Department of Environmental Conservation (NYSDEC), the mandating authority for the remediation, has reviewed and approved the Environmental Guality Bond Act Grant; and

Tollera Bude Moste

WHEREAS, the Department of Public Works recommends approval of the use of the Envirox GAC Fluidized Bed System and that it be authorized to include the Envirox System as a proprietary specification in Project No. 81021; now, therefore, be it

RESOLVED, that the Department of Public Works is hereby authorized and directed to include in the specifications for the Nassau County Fire Service Academy Groundwater Remediation Project and in the advertising thereof a specification providing for Envirex Ltd., Waukesha, Wisconsin, as the exclusive and only supplier of the GAC Fluidized Bed System.

APPROVED

Deputy County Executive

TRANSMITTAL SHEET

environmental engineers scientists planners & management consultants

	?		Date	TRAINING
GEORGE NYSDEC	HEITZMA	ســـــــــــــــــــــــــــــــــــــ		
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By Ken Smith



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

October 4, 1994

Camp Dresser & McKee 100 Crossways Park West Woodbury, New York 11797

Attn: Michael A. Memoli, P.E.

Senior Associate

Re: Fireman's Training Center Remediation Project

Remedial Design Budget Revision

Gentlemen:

The County has reviewed your September 12, 1994 request for transferring funds from bioventing to the groundwater treatment design for the sheeting design.

Upon review the County will give authorization to transfer \$8,925 from Bioventing to Groundwater Treatment.

If you have any questions, please contract Peter Witkowski, Director of Hazardous Waste Services, at 571-9600.

Very truly yours,

John M. Waltz, P.E.

Commissioner of Public Works

JMW: KGA: jb

cc: James A. Oliva, Acting Head, Division of S & WS

Mr. George Heitzman, NYSDEC /

bcc: Mr. Walter Henneberger

B.E.R.A.

FIL

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SITE NAME LITE COUR LITE CAUTORIS THOMAS S. GULOTTA



130042 Nassau County FTC Grant Correspondence

JOHN M. WALTZ, P.E.

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

SEP - 7 1994

August 30, 1994

Camp Dresser & McKee 100 Crossways Park West Woodbury, New York 11797

Att: Michael A. Memoli, P.E.

Senior Associate

Re: Fireman's Training Center Remediation Project

Remedial Design Budget Revision

Gentlemen:

The County has reviewed your August 3, 1994 request for transferring funds from bioventing to the groundwater treatment design.

The County recognizes that there was an increase in scope to the groundwater treatment design work items due to changes in design flow, influent concentrations and overall treatment design. These changes were brought to the attention of the County in your June 13, 1994 correspondence.

As you are aware, the FTC project is being funded by a State EQBA grant, thus any changes to the budget must be approved by the State. The County has discussed your request to transfer funds with the State and prior to approving the transfer of funds, a more detailed explanation of why the transfer of the remaining \$79,590, is required.

B.E.R.A.	FILE SECTION
OTE NAME SITE CODE LIES SECTIONS ONO. ELEMENT OPERABLE UNIT NO. DESC. DEAFT OR FINAL	I IV V

Camp Dresser & McKee August 30, 1994

Page Two

Re: FTC Remediation Project

Remedial Design Budget Revision

In addition, prior to approving any transfer all previous claims concerning bioventing must be submitted.

If you have any questions, please contact Peter Witkowski, Director of Hazardous Waste Services, at 571-9600.

Very truly yours,

Mn M. Waltz, P.E.

Commissioner of Public Works

JMW: KGA: jb

cc: James A. Oliva, Acting Head, Division of S&WS

Mr. George Heitzman, NYSDEC

bcc: Walter Henneberger

CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 496-8400, Fax: 496-8864

August 3, 1994

Commissioner John M. Waltz, P.E. Nassau County Department of Public Works 1 West Street Mineola, NY 11501

Subject:

FTC Budget Revision

Dear Commissioner Waltz:

Camp Dresser & McKee (CDM) requests authorization to transfer funds from the bioventing design budget to the groundwater design budget on the Fireman's Training Center Remedial Design project.

As discussed at our last progress meeting, bioventing will no longer be part of the design, leaving a portion of the funds unused. Due to several unanticipated changes in design flow rates and concentrations, additional costs have been incurred in the groundwater treatment design. In addition, the original estimated distribution of design funds across the individual tasks was not entirely representative of the actual work performed.

To maintain billing consistent with the work performed, CDM requests authorization to transfer:

\$66,690 in labor costs

- \$21,900 in subconsultant costs \$5,400 in direct costs

The transfer will move funds from bioventing (48DN- bioventing) to design (50DNgroundwater treatment). The transfer does not affect the contract upper limit.

Should you have any questions regarding the above changes, please give me a call at (516) 496-8400.

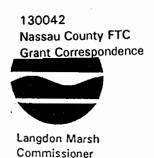
Very truly yours,

CAMP DRESSER & McKEE

Michael Memoli, P.E.

Partner/Project Manager

(nr2/waltz1)



AUG 2 2 1994

Mr. Robert J. McDonald Chief Deputy County Executive County of Nassau Department of Public Works Mineola, New York 11501

AUG 2 3 1994

MERE

RE: Contract No. C300052 Nassau County Fire Training Center

Site No. 1-30-042

Dear Mr. McDonald:

Enclosed for your records is an executed copy of Amendment No. One for the above-referenced contract. This amendment increases the contract by \$708,070.00 bringing the total to \$3,066,070.00.

If you have any questions, please contact George Heitzman, Project Manager, at (518) 457-1641.

Sincerely

Robert J. Cozzy, P.E., Chief Municipal Projects Section

Bureau of Central Remedial Action

Division of Hazardous Waste Remediation

FELL SECT.

Enclosure

cc: w/o enc.

R. Dolan, 5027

cc: w/enc.

G. Heitzman

bcc: w/o enc.

S. Hammond

R. Cozzy

bcc: w/enc.

E. Califano

Her No. deec. Frakt

CONTRACT AMENDMENT NUMBER ONE TO NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 1986 ENVIRONMENTAL QUALITY BOND ACT TITLE 3 INACTIVE HAZARDOUS WASTE DISPOSAL SITES REMEDIATION PROGRAM STATE ASSISTANCE CONTRACT

SITE NAME: Nassau County Fire Training Center

PROJECT NO.: 1-30-042

MUNICIPALITY: County of Nassau

Nassau

This CONTRACT AMENDMENT NUMBER ONE entered into the last day written by and between the New York State Department of Environmental Conservation (hereinafter "the Department"), acting for and on behalf of the State, and The County of Nassau (hereinafter "the Municipality"), TO THE CONTRACT entered into on January 26, 1990, binds the parties as follows:

WITNESSETH

WHEREAS the parties hereto entered into a prior contract which was duly assigned Contract No. C300052 by the Comptroller of the State of New York; and

WHEREAS the parties desire to amend said contract; and WHEREAS, the Department is authorized by Section 27-1313 and Article 52 of the New York State Environmental Conservation Law (hereinafter the "ECL") to enter into contracts on behalf of the State to provide State Assistance, as defined in Section 1 of this Contract.

Now, therefore, the parties agree that Contract Number C300052 is hereby revised as follows:

Delete Paragraph 2.a. and replace with the following: 1)

State Assistance

- The Commissioner agrees to reimburse the Municipality on a periodic basis for its costs in conducting the Remedial Investigation/Feasibility Study and Remedial Design undertaken as a part of the Project as described in the Proposal, in an amount not to exceed Three Million, Sixty Six Thousand and Seventy Dollars (\$3,066,070), which amount has been determined by the Commissioner to be 75% of the estimated Eligible Cost of such project; provided that, such reimbursements shall not constitute State Assistance and shall be refundable by the Municipality to the Department where:
 - the work undertaken and performed by the Municipality is not an Approved Activity,
 - ii) all work necessary to implement and develop the inactive hazardous waste disposal site remedial program is not completed as approved by the Department.
- 2) Schedule A, "Proposal" and Schedule B, "Payment Schedule" are amended by Schedules Al and Bl which are attached hereto and hereby incorporated.

- 3) Delete Paragraph 14 and replace with the following:
 - 14. <u>Term and Effective Date</u>: The term of this contract shall start on February 9, 1989. This Contract shall end on March 31, 1995. This contract will be effective upon approval and filing by the State Comptroller in accordance with Section 112 of the State Finance Law.
- 4) This Contract Amendment will be effective upon approval and filing by the State Comptroller in accordance with Section 112 of the State Finance Law.
- 5) Except as specifically modified herein, all terms and conditions of said prior Contract including any intervening amendments remain in full force and effect.

In witness whereof, the parties have signed this Contract on the date indicated opposite each signature. The signatory for the Department provides the following Agency Certification: "In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract."

State of New York)) ss: County of Nassau)	
Dated: May 24, 1994	MUNICIPALITY: By: 1 (men 1. Une) med Chil Jupaty (sunt Executive)
described in and which executed the seal of said political subdivision; instrument is such seal, that it was	as so affixed by order, resolution or of said political subdivision and
non nauratou	Notary Public Notary Public, State of New York
By: Michael Malule	FOR DEPARTMENT Qualified in Nassau County Commission Expires July 31, 199
Title: DIR DHUL	ritle:
Approved as to form: Approved as to form:	Approved: State Comptroller
Date: AUG 1 2 1994 ASSO ATEATIONNEY	Date: 22 1994
EATIONNEY	

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 1986 ENVIRONMENTAL QUALITY BOND ACT TITLE 3 INACTIVE HAZARDOUS WASTE DISPOSAL SITE REMEDIATION PROGRAM STATE ASSISTANCE GRANT CONTRACT

SCHEDULE A1: PROPOSAL

State Assistance Contract Project #1-30-042

Municipality: County of Nassau

County: Nassau

General Purpose:

The general purpose of this project is to undertake all activities necessary to complete the remedial program required by the Order on Consent signed between the State of New York and the County of Nassau.

General Scope:

The general scope of work to be accomplished under this State Assistance Contract is divided into the three stages required by the Title 3 State Assistance application guidance.

Stage I:Remedial Investigation and Feasibility Study (RI/FS)

The RI/FS will involve all tasks necessary to determine the site conditions, the environmental impact of the site, and to utilize this data to develop the appropriate remedial actions. Specific tasks include: site characterization, marsh/wetlands investigation, development of alternatives, screening of alternatives, post-screening field work, detailed analysis of alternatives, remedy selection, data validation, and citizen participation.

Stage II: Remedial Design (RD)

The scope of the RD activities will include all engineering designs, plans, specifications and contract documents necessary to implement the selected remedial action as defined by the RI/FS Record of Decision.

Stage III:Remedial Action Construction and Construction Oversight (RA)

The scope of RA activities will include all those activities necessary to construct and implement the selected remedial action.

General Cost estimates:

The estimated completion cost of Stage I is \$ 2,325,711.30. This estimate is based on unreviewed payment requests submitted for the RI/FS phase. The estimated cost of Stage II is \$ 1,762,382. This estimate is based on the engineering services contract and force account proposals for the Remedial Design phase.

<u>Original</u>

Stage I:RI/FS	Initial estimated cost Amendment #1 adjustment Net estimated cost (100%) Net contract amount (75%)	\$ \$ \$	3,144,000.00 (818,288.70) 2,325,711.30 1,744,283.50		
	Amendment #1: Remedial Design	<u>1</u>			
Stage II:RD	amendment #1 estimated cost estimated contract amount (75%)	\$ \$	1,762,382.00 1,321,786.50		
Stage III:RA	estimated total cost estimated grant amount		Be Determined Be Determined		
<u>Total</u>					
	Original estimated cost Net amendment #1 cost estimate Total estimated cost Total contract amount (75%)	\$ \$ \$	3,144,000.00 944,093.30 4,088,093.30 3,066,070.00		

Stage:	Time:	Dates:
Stage I	48 months	February 1989 - February 1993
Stage II	24 months	March 1993 - March 1995
Stage III	18 months	April 1995 - October 1996

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 1986 ENVIRONMENTAL QUALITY BOND ACT TITLE 3 INACTIVE HAZARDOUS WASTE DISPOSAL SITE REMEDIATION PROGRAM STATE ASSISTANCE GRANT CONTRACT

SCHEDULE B1: PAYMENT SCHEDULE

State Assistance Contract Project #: 1-30-042

Municipality: County of Nassau

County: Nassau

Requests for payment will be submitted on a quarterly basis (every three months). An initial payment request may be made upon notification of approval and filing of this Contract by the Office of State Comptroller, to reimburse eligible costs accumulated between the date of execution of the Order on Consent and the date of execution of this Contract. No reimbursement payments will be released to the Municipality by the State until a Project Management Plan as described in Section 7(c) of the Contract has been submitted and approved by the Department.

Initial payment requests for Stages II & III may be submitted at the end of the quarter in which the State Assistance Contract Amendments are executed. Reimbursement will never exceed the total Contract amount.

A Five percent (5%) retainage will be withheld from all payment requests until the completion of the Stage in which the work task was completed and accepted. Retainages will be released when the following milestones are met:

Milestone:

Retainage Release:

Stage I:

Approval of Final RI/FS Report (including responsiveness summary) or completion of the IRM; whichever occurs later.

Release of Stage I Retainage

Stage II:

Approval of Final Design Specifications, Plans and Bid Documents Release of Stage II Retainage

Stage III:

Final DEC inspection and approval of As-Built drawings

Release of Stage III Retainage



STATE OF NEW YORK COUNTY OF NASSAU

NºP59293

I, JOHN A. DeGRACE, Clerk of the Board, Nassau County Board of Supervisors, do hereby certify that the foregoing is a true and correct copy of the original http://www.new.york.on.www.new.york, on white Board of Supervisors of Nassau County, New York, on white and on file in my office and recorded in the record of the proceedings of the Board of Supervisors of the County of Nassau and is the whole of said original.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said Board of Supervisors,

his _____d

n the year one thousand nine hundred and

JÔHN A. DeGRACE

Clerk of the Board

Nassau County Board of Supervisors

puty County A. .. ney

RESOLUTION NO. 1124 - 1993

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE, OR HIS
DESIGNEE, TO MAKE APPLICATION TO THE NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION TO ENTER INTO A NEW
YORK STATE ASSISTANCE CONTRACT PURSUANT TO ARTICLE 52 OF THE
ENVIRONMENTAL CONSERVATION LAW IN CONNECTION WITH THE
DEVELOPMENT AND IMPLEMENTATION OF A REMEDIAL PROGRAM AT THE
FIREMAN'S TRAINING CENTER, AND TO AUTHORIZE THE COMMISSIONER
OF PUBLIC WORKS, OR HIS DESIGNEE, TO UNDERTAKE SUCH ACTIONS
AND TO EXECUTE SUCH DOCUMENTS AS MAY BE NECESSARY RELATIVE TO
SUCH STATE ASSISTANCE PROGRAM IN ORDER TO INSURE TIMELY
IMPLEMENTATION ON THE PART OF NASSAU COUNTY OF SUCH REMEDIAL
PROGRAM AND EXPEDITIOUS REIMBURSEMENT OF ELIGIBLE COSTS BY
NEW YORK STATE OF EXPENSES INCURRED BY NASSAU COUNTY IN THE
MATTER.

Passed by Board of Supervisors on NOV 29 1993 votes for 108; votes against, none. Became a Resolution on NOV 29 1993 with the approval of the Deputy County Executive Acting for the County Executive.

WHEREAS, the County of Nassau has entered into an Order on Consent with the State of New York, Department of Law and Environmental Conservation, with respect to an inactive , hazardous waste disposal site known as the "Nassau County

Fireman's Training Center", in Old Bethpage, Town of Oyster Bay, Nassau County (herein the "Site");

WHEREAS, the aforesaid Order on Consent provides that the County shall develop and implement a remedial investigation/feasibility study, and remedial program (herein called the "Project"), designed to abate and eliminate the threat to the public health or environment at the Site and its off-site environs;

WHEREAS, Article 52 of the Environmental Conservation

Law, the Environmental Quality Bond Act of 1986, authorizes

financial assistance to municipalities for remediation of

inactive hazardous waste disposal sites by means of a written

agreement;

WHEREAS, the County deems it to be in the public interest and benefit under this law to enter into a contract therewith:

WHEREAS, State Assistance shall be provided to reimburse the County on a periodic basis for eligible Project costs as documented by a State of New York Standard Voucher, pursuant to the aforesaid contract;

WHEREAS, the County shall submit such reports, documents, data, contractual documents, endorsements and other information with respect to the Project as may from time to time be necessary; now therefore, be it

RESOLVED, that the County Executive, or his designee, is authorized to act in behalf of the County in all matters related to the aforesaid contract for financial assistance between the State and the County, including but not limited to the application for and the execution of the State

Assistance Contract, and for the execution of all documents and approval of all appropriate matters related to the Project; and, be it further

RESOLVED, that the Commissioner of Public Works, or his designee, is authorized to execute all appropriate documents and claim forms and act in behalf of the County in all other matters related to the State Assistance Contract, exclusive of application, acceptance, execution, or amendment of the aforesaid State Assistance Contract.

2 9 1993

Deputy County Executive

pianners, & management consultants

August 3, 1994

CAMP DRESSER & McKEE

188 S. Journay's Park West Woodbury, New York 11797 4°5-8400, Fax: 496-8864

Commissioner John M. Waltz, P.E. Nassau County Department of Public Works 1 West Street Mineola, NY 11501

Subject:

FTC Budget Revision

Dear Commissioner Waltz:

Camp Dresser & McKee (CDM) requests authorization to transfer funds from the bioversing design budget to the groundwater design budget on the Fireman's Training Center Remarkable Design project.

As discussed at our last progress meeting, bioventing will no longer be part of the design leaving a portion of the funds unused. Due to several unanticipated changes in design rates and concentrations, additional costs have been incurred in the groundwater treatmet design. In addition, the original estimated distribution of design funds across the individual tasks was not entirely representative of the actual work performed.

To maintain billing consistent with the work performed, CDM requests authorization to transfer:

\$66,690 in labor costs \$21,900 in subconsultant costs \$5,400 in direct costs

The transfer will move funds from bioventing (48DN-bioventing) to design (50DNgroundwater treatment). The transfer does not affect the contract upper limit.

Should you have any questions regarding the above changes, please give me a call at (516) 496-8400.

Very truly yours,

CAMP DRESSER & McKEE

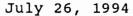
Michael Memoli, P.E. Partner/Project Manager

3/25/94
Told Ken Arnold that
these dollar amounts should
be broken down & justified.

(nr2/waltz1)

R. Coxy H. Haityman

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010





Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center (Site #130042)
Dedicated Pumps for Design-Phase Sampling

This is to confirm our July 26, 1994 conversation regarding DEC authorization to purchase dedicated, variable-speed pumps for selected monitoring wells. Due to apparently fluctuating contaminant concentrations and a possible slug of benzene contamination moving through the off-site wells, DEC agrees that periodic monitoring is necessary during the design phase to optimize design and operation of the pump & treat system. These wells will also be used for quarterly monitoring during operation of the groundwater remediation system. Because the purchase of dedicated, variable-speed pumps is more cost-effective than transferring and decontaminating a single pump, DEC agrees to fund the cost under the EQBA Title 3 program.

The following wells are scheduled for quarterly sampling during design, and will receive a dedicated system:

FTC-W-9A	FTC-4-B	BP-9C
FTC-W-9B	FTC-5	BP-10B
FTC-W-14A	BP-2B	BP-10C
FTC-W-14B	BP-4B	
FTC-W-32	BP-4C	
FTC-W-35	BP-9B	

Based on an estimated cost of \$22,500 for these wells, a minimum of five (5) bids will be required to establish EQBA cost eligibility.

Please call me at (518) 457-1641 if you have any questions.

Sincerely,

George W. Heitzman, P.E.

Senior Environmental Engineer Division of Hazardous Waste

Remediation

WH/a: buypumps.ftc

cc: A. Shah

R. Cozzy/G. Heitzman

ile: 130042/NCFTC/Remedial Design

THOMA' COU:



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS DIVISION OF SANITATION AND WATER SUPPLY HAZARDQUS WASTE SERVICES UNIT TELEFAX NO. (516) 571- 18

_ (Including This Page) NO. PAGES_

IF THERE 32 ANY PROBLEMS RECEIVING THIS TRANSMISSION, PLEASE CALL (516) 571-9600.

HOHN IN WALTZ PE ACTINE . ANDONER THOMAS S. GU:

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KGA

JOHN M. WALTZ, P.E.
ACTING CONHESSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

December 17, 1992

Mr. John Isbister
Malcolm Pirnie, Inc.
1.0 Eisenhower Drive
PO Box 36
Paramus, New Jersey 07653

RE: Fireman's Training Center
Reallocation of Funds Between Work Items
RI/FS Report/Endangerment Assessment
Capital Project No. S81020C

Dear Mr. Isbister:

Please refer to your letter of October 14, 1992, outlining the need for additional funding for the Remedial Investigation and Feasibility Study (RI/FS) Reports.

Upon review of your breakdown for the FS revisions, the County approves \$13,500 of the requested \$25,000. The County doesn't believe that the costs associated in Items One, Three and Four should be incurred by the County. The IRM was initiated on the premise that floating product could be collected. This was based upon the results of the Recovery Well Pump Test, attached, completed by your office. Authorization is given to reallocate \$13,500 from Work Item 3 to Work Item 24.

The County does not believe the \$7,000 increase to complete the RI Report is justified. The work associated with the \$7,000 cost was not out of scope but was to address editorial revisions and finalize the Report. The original budget and subsequent increases as a result of the supplemental remedial investigation was sufficient to complete this work.

Mr John Isbister

_colm Pirnie, Inc.
December 17, 1992

Page Two

RE: Fireman's Training Center
Reallocation of Funds Between Work Items

Finally, separate authorization letters have been sent for the work associated with the Endangerment Assessment.

If you have any questions, please contact Mr. Peter Witkowski at (516) 997-8282.

Very truly yours,

John M. Waltz, P.E.

William albetta, PE.

Acting Commissioner of Public Works

JMW: KGA; jm

Enclosure

cc: James A. Oliva, Director of Environmental Operations Acting Head, Division of Sanitation & Water Supply Wayne Gaddy, Jr., Director of Construction FCPS Acting Head, Division of Administration MALCOLM. PIRNIE

Kindingle The Milker the

MALCOLM PIRNIE, INC. ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

them- from

October 14, 1992

Mr. James A. Oliva, P.E. Director of Environmental Operations Acting Head, Division of Sanitation and Water Supply Nassau County Department of Public Works County Executive Building Mineola, New York 11501

Re: Nassau County Fireman's Training Center
Capital Project No. \$81020C
Reallocation of Funds Between Work Items/
RI/FS Report/Endangerment Assessment

Dear Mr. Oliva:

Please refer to your letter of September 1, 1992, wherein the County requested a breakdown of the \$33,970 that Malcolm Pirnie requested to complete the revisions to the Feasibility Study. We had identified six out-of-scope revisions which needed to be incorporated to complete the FS report. The budget estimate for the completion of the FS by the end of September was \$33,970, of which \$25,000 was requested for the out-of-scope revisions. The difference of \$8,970 was from the original budget and would be used to address the remaining comments from the County and the State to finalize the report.

The out-of-scope revisions and the cost to incorporate these revisions into the report are summarized below:

1/1.

A summary of the IRM design and a statement of why it is not feasible. The cost estimate to complete this revision is \$1,500.

2. A summary of reports prepared during the IRM and pre-IRM design work. We were under the impression that the IRM was to be a stand alone document and the FS was to incorporate it by reference only. The budget estimate to complete this revision is \$5,000.

MALCOLM PIRNIE

> Mr. James Oliva Nassau County Department of Public Works

October 14, 1992 Page 2

3.

Elimination of references to the IRM, but inclusion of appropriate technologies and selected alternatives still needed to address on-site remediation. The FS was originally written with the understanding that the IRM would be in place and that certain remedial activities would be underway or completed. The budget estimate to complete this revision is included in the following discussion.



Revisions to appropriate text figures and cost estimates affected by the elimination of the IRM. This is an extension of the above revision (3) and the associated costs for these two revisions are \$10,000.

- 5. Incorporation of an additional alternative to discharge groundwater to the golf course property using injection wells or recharge basins. This alternative was originally discussed with the County but was considered infeasible. Later discussions with representatives of the golf course made this a feasible alternative. The associated cost to complete this revision is \$1,500.
- 6. Revisions to the text to identify technologies instead of alternatives and the grouping of selective technologies into alternatives. The draft FS submitted in June 1992 was completed in accordance with the County and States guidelines and in accordance with appropriate guidance documents on conducting feasibility studies. This revision is considered to be a preference of style which resulted in substantial editorial revisions and cost analysis revisions. The associated cost to complete this revision is \$7,000.

We have completed this work on verbal authorization by the County. I hope the information provided is sufficient to answer your concerns on the breakdown of the \$33,970 to complete this work. We respectfully request a written authorization on increasing Work Item 24 by \$25,000 from its current budget of \$45,400 to \$70,400. In addition, we need a written authorization that Work Item 28 has been increased by \$7,000 to complete the RI report as summarized in Item 1 of your September 11, 1992 letter.

The County has also given Malcolm Pirnie permission to start the Supplemental RI Endangerment Assessment, as stated in your letter of July 9, 1992 (attached). However, we did not receive written notification as to which work item numbers the County has assigned for the three tasks identified for completion of the Supplemental Endangerment Assessment; these tasks being the water level recorder information, the modeling and the endangerment assessment. Would you please inform us as to the appropriate work items, so that we can process our invoices.



Mr. James Oliva Nassau County Department of Public Works October 14, 1992 Page 3

If you have any questions or need additional information, please call.

Very truly yours,

MALCOLM PIRNIE, INC.

Terrance R. Haelen Project Manager

dt

c: K. Arnold, NCDPW

32/0724-391-08-43-Er ATTOJUD 2 BANGHT
EVITUDEXE YTHUCO



CCH JOHN M. WALTZ, P.E. ACTING COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

March 12, 1993

Malcolm Pirnie, Inc. One International Blvd. Mahwah, New Jersey 07495

Attn: Mr. John Isbister

Vice President

RE: Additional Copies of RI/FS

Capital Project 881020

Gentlemen:

Please refer to your letter dated February 17, 1993, requesting \$1,250 to provide the requested copies of the Fireman's Training Center Reports.

The County requests the number of copies be increased to seven of each. The reports include the Remedial Investigation with Appendices, Feasibility Study with Appendices and the Endangerment Assessment.

Authorization is given to reallocate \$2,000 from Work Item Four to Work Item Twenty-Four to complete this work. If you have any questions, please contact Mr. Kenneth G. Arnold at (516) 571-9600.

Very truly yours,

John M. Waltz, P.E.

Acting Commissioner of Public Works

JMW: KGA: jm

cc: Wayne Gaddy, Jr., Acting Head, Division of Administration



MALCOLM PIRNIE

MALCOLM PIRNIE, INC. ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

February 17, 1993

Mr. John M. Waltz, P.E.
Acting Commissioner of Public Works
County of Nassau
Department of Public Works
Mineola, New York 11501

Re:

Additional copies of RI/FS Reports

Capital Project Number: \$81020C

Dear Mr. Waltz:

Nassau County has requested extra copies of the Remedial Investigation (RI) report, the Feasibility Study (FS) report, and the Endangerment Assessment (EA) report for the Fireman's Training Center (FTC). The number of copies requested are:

- 2 copies of the RI Report with Appendices
- 6 copies of the FS Report
- 5 copies of the Appendices to the FS Report
- 5 copies of the Endangerment Assessment

We estimate that it will cost approximately \$1,250 to provide these copies. This cost includes \$450 for Malcolm Pirnie labor and expenses and \$800 for reproduction costs. Based on the final invoice for the reproduction, these costs may vary. We respectfully request that Work Item No. 24 be increased from \$65,311.23 to \$66,561.23 to cover the cost of these services. Upon written approval we will copy and forward these reports to you. Please call if you have any questions.

Very truly yours,

MALCOLM PIRNIE, INC.

Terrance R. Haelen

Senior Project Hydrogeologist

c: Ken Arnold, NCDPW
John Isbister, MPI
Maureen Sullivan, MPI

dtaa/wansu.ser

NITERNATIONAL BOLLEVARD

AHWAH NI 07495-0018

201,520,470

EAY OVERSOURCE



CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 516 496-8400, Fax: 516 496-8864

June 14, 1994

21 NOA

Commissioner John Waltz Nassau County Department of Public Works One West Street Mineola, NY 11501

Subject:

Technical Typing Services

MBE/WBE

Dear Commissioner Waltz:

Camp Dresser & McKee (CDM) proposes to use Contour Graphics, Inc., a certified WBE firm, to provide technical typing services for the Fireman's Training Center Remedial Design project.

In accordance with State and County guidelines, we have solicited three bids. Copies of the written bids are attached.

The original bids, dated February, 1994, had Contour Graphics as low bid at \$15.00 per hour, followed by TSI at \$18.00 per hour and Tempsations at \$22.00 per hour. The original bids are attached.

Unfortunately, neither Contour Graphics nor TSI have been able to provide the requested services for their original bid price.

Contour Graphics has finally found an applicant for the services at a rate of \$21.00 per hour. A copy of their new bid is attached.

CDM requests authorization to use Contour Graphics at the above rate for the remaining technical typing related to the project. The change in hourly rate will not affect the overall project cost.

Very truly yours,

CAMP DRESSER & MCKEE

Michael A. Memoli, P.E.

Partner

cc:

G. Heitzman, NYSDEC

(nr1/waltz2)

E CHIT NO. DESC.

DRAFT OR FINAL

ers, scientists,

February 1, 1994

Ms. Denise Taggart Camp, Dresser & McKee 100 Crossway Park West Suite 415 Woodbury, NY 11797

Dear Ms. Taggart:

Pursuant to our conversation on 2/1/94, Contour Graphics, Inc. (CGI), is pleased to submit the price quote outlined below to provide a word processor in your Woodbury office for a period of one to two years, with no price increase should the project extend to two years.

One Word Processor (40 hours/week)

S15/hour

As we discussed, CGI would place an advertisement in a Woodbury-area newspaper, soliciting resumes for this position. Upon my review, I would select five potential candidates and submit these resumes to you for your review and approval. Subsequent to your approval, the interview process by CGI and Camp, Dresser & McKee could be conducted either separately or at the same time.

Thank you for the opportunity to submit this price quote to Camp, Dresser & McKee. If I can be of any service or answer any questions you may have, please contact me at your convenience.

Very truly yours,

CONTOUR GRAPHICS, INC.

Senda J. Roland

Linda L. Roland, CPS

President

LLR/tmv

OFFICE SUPPORT PERSONNEL

TEMPORARY SOLUTIONS, INC. 50 EAST 42nd STREET, SUITE 208 NEW YORK, NEW YORK 10017 (212) 557-4078 557-4146 FAX

February 15, 1994

Camp Dresser McKee 100 Crossway Park W. Woodberry, N.Y. 11797

Attention: Denise Taggart

Dear Ms. Taggart:

As per our conversation on February 15, 1994, our bid for a word processor 5.1, and filing will be \$18.00 per hour.

If you have any further questions, please do not hesitate to call

Sincerely,

Miriam Hernandez

Office Manager

TEMPSATIONS

TEMPORARY WORD PROCESSING AND CLERICAL PERSONNEL

Old Chelsea Station P.O. Box 201 New York, N.Y. 10011

(212) 255-9435

February 16, 1994

Ms. Denise Taggart Camp, Dresser & McKee 100 Crossway Park West Woodbury, New York 11797

Re: Bid for Word Perfect Secretary

Dear Denise:

Thank you for the opportunity to bid on your job order!

As I understand it, the specifics are as follows: Word Perfect secretary who will type, file and occasionally answer the phone. The job will last a minimum of 2 years and the hours will be 8am-5pm daily. I also understand that you would like to interview 2 or 3 candidates before making a decision. I believe I can safely say that we can supply the required temp for \$22.00/hour.

Please remember that our service is satisfaction guaranteed. If you are unhappy with our temp for any reason, there is no charge.

I look forward to your favorable response and to a mutually beneficial working relationship. Thank your for your kind and prompt attention to this matter.

Sincerely,

Elizabeth Dobricki

President

June 7, 1994

Ms. Denise Taggart Camp, Dresser & McKee 100 Crossway Park West Suite 415 Woodbury, NY 11797

Dear Ms. Taggart:

We are pleased to submit our contract terms to provide a word processor in your Woodbury office for a period of not less than one year to two years, with no price increase should the project extend to two years. The per hour amount includes the addition of benefits.

One Word Processor (40 hours/week)

\$21/hour

You will be billed for these services on a bi-weekly basis with a net payment of 30 days.

Should you agree to contract with us for these services, please sign this letter and return one copy (enclosed) to me.

If you should have any questions, please contact me at (914) 631-2720.

Very truly yours,

CONTOUR GRAPHICS, INC.

Linda L. Roland, CPS

President

LLR/tmv Enclosure

Michael Memoli, P.E.

Vice President

Linda L. Roland, CPS

President

Contour Graphics, Inc.

JOHN M. WALTZ, P.E.

COMMISSIONER

THOMAS S. GULOTTA COUNTY EXECUTIVE



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

June 2, 1994

3 1994

Mr. George Heitzman, P.E.
New York State Department of
 Environmental Conservation
Eastern Remedial Projects Section
50 Wolf Road
Albany, New York 12233-4011

Re: Nassau County Fireman's Training Center (Site #130042) State EQBA Contract Amendment Design Phase Work

Dear Mr. Heitzman:

Please find enclosed seven (7) signed and notarized contract amendments for the Remedial Design Phase of the above referenced project.

If there are any questions, please contact me at (516) 571-9600.

Very truly yours,

Peter J. Witkowski

Geta D. Withouse

Director of Hazardous Waste Services

PJW:jb Encls.

cc: James A. Oliva, Acting Head, Division of Sanitation and Water Supply

JOHN M. WALTZ, P.E.

COMMISSIONER

THOMAS S. GULOTTA COUNTY EXECUTIVE



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

May 21, 1994

Mr. George Heitzman, P.E.
New York State Department of
Environmental Conservation
Municipal Projects Section
50 Wolf Road
Albany, New York 12233-7010

RE: Fireman's Training Center - Remedial Design Geotechnical Borings

Dear Mr. Heitzman:

Camp Dresser & McKee has retained the services of Connecticut Test Boring to perform the geotechnical borings for the treatment building.

Please review the attached correspondence and advise this office as to whether this is acceptable. If you have any questions, please contact Kenneth G. Arnold at (516) 571-9600.

Very truly yours,

Peter J. Witkowski

Director of Hazardous Waste Services

D. Without

PJW:jm

Attachment

cc: James A. Oliva, Acting Head, Division of Sanitation and Water Supply



CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 516 496-8400, Fax: 516 496-8864

May 2, 1994

Commissioner John M. Waltz Nassau County Department of Public Works 1 West Street Mineola, NY 11501

Subject:

Selection of Drilling Contract for Geotechnical Soil Dorings at FTC

Dear Commissioner Waltz:

Camp Dresser & McKee (CDM) and its subconsultant, Mellick-Tully, request authorization to use Connecticut Test Borings, Inc., of Seymour, Connecticut, for the geotechnical borings at the Fireman's Training Center (FTC).

As required, we have solicited four bids among which Delta represented a WBE "company". The bids were:

Delta Well & Pump Co.	\$2,925
Tri County Drilling	\$1,935
Environmental Technical Drilling	\$2,080
Connecticut Test Borings	\$1,540

CDM gave prefence to the WBE status of Delta; however the price differential was significant. Therefore, we request authorization to select Connecticut Test Borings at the price quoted above.

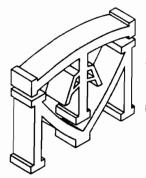
Very truly yours,

CAMP DRESSER & McKEE

Mark Maimone, P.E.

Project Manager

(s1/waltz1)



MELICK-TULLY AND ASSOCIATES, INC.

GEOTECHNICAL ENGINEERS AND ENVIRONMENTAL CONSULTANTS 117 CANAL RO., SOUTH BOUND BROOK, NJ 08880 (908) 356-3400 FAX: (908) 356-9054 PRINCIPALS:
THOMAS E. TULLY, P.E.
CHARLES T. MELICK, P.E.
ROBERT J. VAN ORDEN, P.E.
RAYMOND J. TULLY, P.E.
EUGENE M. GALLAGHER JR., P.E.
ROBERT E. SCHWANKERT, P.E.
TODD E. HOROWITZ, P.E.

ASSOCIATES: PETER G. MICKLUS, P.E. WILLIAM M. STRUBEL, P.E.

April 13, 1994

Camp, Dresser & McKee 100 Crossways Park West - 4th Floor/Suite 415 Woodoury, New York 11797

Attention: Ms. Barbara Stanton, P.E.

Re: Fireman's Training Center Bethpage, New York

Dear Barbara:

In accordance with your recent request, attached are the quotes I received from the four drilling contractors:

Connecticut Test Borings, Inc. of Seymour, Connecticut was selected to do the work.

Very truly yours,

MELICK-TULLY and ASSIOCIATES, INC.

Toda E. Hornwitz, P.E.

TEH/tlp 5121-001

Company Mobe Company Demo Tri County Drilling \$450 Technical Drilling Delta Well N/C	% - 900	Soil Drilling Boreholes (assumes 3 borings to 30') \$12.50/ft.x90=\$1125 \$4/ft.x90'=\$360 Lump Sum \$2/ft.x90'=\$180 \$950 Lump Sum \$2/ft.x90'=\$180 \$2,925	Grouting Boreholes \$4/ft.x90'=\$363 \$2/ft.x90'=\$180 N/C	Total \$1,935 \$2,080	Add Ons Increase Total Drum Spoils for Level C \$1,935 \$125/Drum \$150/Day \$2,080 \$40/Drum N/C \$2,925 \$40/Drum No Price Pr	Increase for Level C \$150/Day N/C No Price Provided
Connecticut \$450 Test Borings		Lump Sum \$1000	\$1/ft.x90'=\$90	\$1,540	\$40/Drum	\$50/Hour

130042
Nassau County FTC
Grant Correspondence
JOHN M. WALTZ, P.E.
COMMISSIONER

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

May 10, 1994

Mr. George Heitzman, P.E. New York State Department of Environmental Conservation Municipal Projects Section 50 Wolf Road Albany, New York 12233-7010

RE: Fireman's Training Center - Remedial Design Removal of Envirex Unit at the Site

Dear Mr. Heitzman:

Camp Dresser & McKee proposes to retain the services of Associated Rigging and Hauling to perform the rigging to remove the fluidized bed pilot unit.

Please review the attached correspondence and advise this office as to whether this is acceptable. If you have any questions, please contact Kenneth G. Arnold at (516) 571-9600.

Very truly yours,

イズ Peter J. Witkowski

Hemil Much

Director of Hazardous Waste Services

PJW:jm

Attachment

cc: James A. Oliva, Acting Head, Division of Sanitation and Water Supply



environmental engineers, scientists, planners, & management consultants

CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 516 496-8400, Fax: 516 496-8864

April 29, 1994

Commissioner John M. Waltz, P.E. Nassau County Department of Public Works 1 West Street Mineola, NY 11501

Subject: Removal of the Envirex Unit at the FTC Site

Dear Commissioner Waltz:

With the training exercises at the Fire Service Academy scheduled for next week, Camp Dresser & McKee has solicited bids for the removal of the fluidized bed reactor (FBR) unit.

Three bids were received to provide a crane to load the FBR onto a truck.

Action Crane Corp.	\$2,200
Valient Rigging	\$2,600
Associated Rigging and Hauling	\$2,000

Maimone

On the basis of the above price quotes, CDM seeks authorization to select Associated Rigging and Hauling of Old Bethpage, New York to perform the required service.

Very truly yours,

CAMP DRESSER & McKEE

Mark Maimone Project Task Leader

(m20/waltz)

JOHN M. WALTZ, P.E.

COMMISSIONER

THOMAS S. GULOTTA COUNTY EXECUTIVE



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

MAY - 9 100 1

May 5, 1994

Mr. George Heitzman, P.E. New York State Department of Environmental Conservation Municipal Projects Section 50 Wolf Road Albany, New York 12233-7010

RE: Fireman's Training Center - Remedial Design Selection of Air Modelling Specialist

Dear Mr. Heitzman:

Camp Dresser & McKee proposes to retain the services of Tabasco Drilling Corporation to perform the final soil borings for the bioventing pilot study.

Please review the attached correspondence and advise this office as to whether this is acceptable. If you have any questions, please contact Kenneth G. Arnold at (516) 571-9600.

Very truly yours,

Peter J. Witkowski

Fite J. Willowall

Director of Hazardous Waste Services

PJW:jm

Attachments

cc: James A. Oliva, Acting Head, Division of Sanitation and Water Supply



CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 516 496-8400, Fax: 516 496-8864

April 21, 1994

Commissioner John M. Waltz Nassau County Department of Public Works 1 West Street Mineola, NY 11501

Subject:

Selection of Drilling Contract for Final Soil Borings at FTC

Dear Commissioner Waltz:

Camp Dresser & McKee (CDM) and its subconsultant, Envirogen, request authorization to use Tabasco Drilling Corporation of Mainsport, New Jersey for the final soil sampling at the Fireman's Training Center (FTC).

As required, we have solicited three bids among which Delta represented a WBE "company". The three bids were:

Tabasco Drilling Corp. \$10,905 Parratt - Wolff Inc. \$11,383 Delta Well & Pump Co., Inc. \$14,250

CDM gave prefence to the WBE status of Delta; however the price differential was significant. Therefore, we request authorization to select Tabasco Drilling Corp., at the price quoted above.

Very truly yours,

CAMP DRESSER & MCKEE

Mark Maimone, P.E.

Project Manager

(s1/waltz1)

TABASCO DRILLING CORPORATION P.Q. BOX 747 HAINESPORT, NJ (609) 265-9328

DRILLING ESTIMATE

DATE	4/19/9	4	7	PROPOSAL	L NO.	941932	
TELEPHONE NO.	609/936-96	⊣ (TELEFAX I		609/936-9615		
CLIENT	ENVIROGEN CONTACT			DAVE WAGNER			
PROJECT	TEST BORIN	GS (15 TES	_		7 ^k)	-ATTENDED	
LOCATION	FIREMAN TR						
APPROX. DRILLING DAYS	5	Н	EALTH &	SAFETY		LEVEL D	LEVEL C
		•• то	TAL ESTI	MATE -		\$10,904.85	\$14,338.81
LABOR	TYPE	SZE	NON	UNITS	PRICE/ UNIT	AMOUNT	AMOUNT
Mob/Demob			LS	1	750.00	750.00	750.00
Per Diem			DAY	5	140.00	700.00	750.G0
Dritting	HSA	4 1/4	FT	428	9.20	3,937,60	5,118.88
Spik Spoon Samples		2 -	EA	15	15.75	236,25	307.13
Decontamination Time			HRS	7	135.00	945.00	1,228,50
Grout Test Borings			FT	428	5.75	2,461.00	3,199.30
Standby Time			HFS		135.00	as incurred	as incurred
		LABOR COS	ts			9,029.85	11,353,81
A ATERIALS		-				·	
SS Gallon Drums			EA	30	35.00	1,050.00	1,050.00
		MATERIAL	COSTS			1,050.00	1,050.00
RENTALS & HEALTH & SAFE	TY						
Aespirator Time Hr/Man			HAS	80	\$.50		760.00
Health & Safety Protection			CREW	5	MOD D/C	\$60.00	700.00
Steam Cleaner Rental			DAY	5	95.00	475,00	476.00
		RENTAL &	HEALTH &	SAFETY	COSTS	825,00	1,935,00

TELEPHONE AREA CODE 315/437-1429

FAX 315/437-1770

800/782-7260

TO

April 15, 1994

Mr. Dave Wagner ENVIROGEN, INC. Princeton Research Center 4100 Quakerbridge Road Lawernceville, New Jersey 08648

RE: Request for Quotation

Fireman's Training Center - Bethpage, New York

Dear Mr. Wagner:

In response to your request for quotation dated April 14, 1994, we propose to furnish all labor, materials and equipment necessary to complete the scope of work for a lump sum of \$11,383.00 This price is based on the quantities provided, our listed assumptions and the following unit costs:

Mobilization and demobilization	\$800.00 lump sum
Hollow stem auger drilling	12.00/lineal foot
Split spoon sampling	20.00 each
Bentonite/grout backfill	5.00/lineal foot
Decontamination	135.00/hour
55-gallon drums (including drum staging)	65.00 each
Standby	140.00/hour
Level C upgrade	45.00/crew hour

Our lump sum price includes 8 hours of decontamination and 15 drums. Our price also assumes the following:

- 1) a decontamination pad is available onsite;
- 2) utilities will be cleared by others;
- 3) surface restoration is limited to a concrete or cold patch cap to each boring; and
- 4) the minimum length work day is 10 hours.

The rig we anticipate using to complete this work is a 1994 Diedrich D-50, mounted on a 1994 Ford truck.

In closing, we look forward to working with your company on this project, we are prepared to begin on April 25, 1994 and will mobilize a crew to the site on April 24, 1994 to insure a good kick-off to your project. Additionally, because our crew will be staying out-of-town, you can expect them to work aggressively to complete your project in timely fashion. We look forward to your favorable response to our proposal.

Very truly yours,

PARRATT-WOLFF, INC.

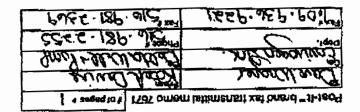
Willia More

mile exquest

William Morrow

WHM

encs





DELTA WELL & PUMP Co., Inc.

WELL WATER SYSTEMS

April 18, 1994 0350-94

Mr. Dave Wagner Envirogen Inc. Princeton Research Center 4100 Quakerbridge Road Lawrenceville, NJ 08648

Reference: Fireman's Training Center, Bothpage, MY

Dear Dave:

Delta Well & Pump Co., Inc. is pleased to submit a proposal for the above referenced project.

Our proposal assumes the following:

- All sites available to truck mounted drilling equipment
- A water supply is available
- Mark outs to be the responsibility of Envirogen Inc.
- Level D personal protection
- Monitoring to be the responsibility of Envirogen Inc.
- Health and safety plan to be provided by Envirogen Inc.
- Drill cuttings to be the responsibility of Envirogen Inc.

Our price includes the following:

Drill (15) fifteen test borings to 35 feet and obtain (1) one two inch split spoon sample in each boring.

I hope the above meets with your approval. If you have any questions or if we can be of further assistance please call.

Very truly yours,

_ DELTA WELL & PUMP CO., INC.

Robert T. Devine
Vice President

RTD/leb (61)

ED-94-0 Nassau County FTC Grant Correspondence



New York State Department of Environmental Conservation

MEMORANDUM

TO: FROM: Michael J. O'Toole, Jr., Director, DHWR

Charles N. Goddard, Assistant Director, DHWR

SUBJECT:

EQBA Title 3 Eligibility Determination

DATE:

MAY 3 1994

Attached is an approved addition to the "Guidelines for Determination of Eligibility under the EQBA Title 3 Provisions." This will be sent to the Municipal Projects Section for inclusion

Charles N Tollas

Attachment

cc: A. DeBarbieri

- J. Lacey
- R. Davies
- J. Eckl
- A. Carlson, NYSDOH

in the Title 3 Guidelines.

- E. McCandless
- S. Ervolina
- S. Hammond
- E. Belmore
- A. Rockmore
- J. McKeon
- R. Cozzy
- A. Fossa
- J. Kelleher
- J. Colquhoun
- D. Johnson
- D. Ritter

Regional Directors

Regional Engineers

Regional Hazardous Waste Remediation Engineers

Regional Citizen Participation Specialists

Proposed Addition to "Guidelines for Determination of Eligibility under the EQBA Title 3" Provisions

<u>Question:</u> What is the basis for EQBA Title 3 funding of a redundant system for groundwater recharge?

<u>Discussion:</u> Due to anticipated iron precipitation in the effluent from a groundwater pump and treat system, a Long Island municipality has proposed a recharge system consisting of:

- A renovated recharge basin to be divided by a berm and fitted with infiltration rings, and
- Four injection wells screened in the Magothy Aquifer.

The basin and wells would each be capable of accepting the full 2200 gpm from the treatment plant. The basin would be divided by the berm to allow for cleaning/rehabilitation of one half while the other half continued to operate. Each half basin could accept the full design flow provided that there are no coincident stormwater flows. Due to small lenses of silt in the upper portion of the aquifer, infiltration rings would be constructed through the bottom of the basin to improve the infiltration rate.

Although the renovated basin is capable of full recharge with a reasonable provision for maintenance, the Municipality has recommended full redundancy using four new injection wells. This is partly due to basin fouling problems at a neighboring facility that has caused reduced groundwater pumping while their basin is rehabilitated. The neighboring facility does not have iron precipitation in their treatment train, as this facility will. The injection wells would be used for recharge if the entire basin became fouled or if stormwater flows prevented maintenance.

Because the rehabilitated basin is self-sufficient for recharge, EQBA Title 3 funds cannot be expended for additional design conservatism. Alternatively, a fifth injection well would also comprise a self-sufficient recharge alternative; one well could be rotated out of service for maintenance. Therefore the basis for EQBA funding is the cost of the rehabilitated basin, or the equivalent cost of five reinjection wells, whichever is lower. If the Municipality can demonstrate that the rehabilitated basin could not be adequately maintained due to frequent stormwater flows, the basis will be the cost of five reinjection wells.

maismal voissmosip

Tet water the real

<u>Response:</u> The basis for EQBA Title 3 reimbursement will be the cost of the rehabilitated basin, or the cost of five reinjection wells, whichever is lower.

Proposed by:

Jeonel Jenson

Date: 4/26/14

Approved by:

Date: 4/27 94

1874 Date: 4/37/94

Date: 4/28/94

back. A feel o. / Date: 5/3/44

130042 Nassau County FTC **Grant Correspondence**

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-7010



April 18, 1994

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Nassau County Fire Training Center (Site #130042) Re: Selection of Laboratories for Bioventing Study

Upon review of your April 12, 1994 transmittal, the bidding requirements for EQBA Title 3 Eligibility have been met, and the costs for E3I and Chemtech to perform soil and air analyses will be fully eligible for reimbursement.

If you have any questions please call me at (518) 457-1641.

Sincerely,

George W. Heitzman, P.E. Senior Environmental Engineer Division of Hazardous Waste

Remediation

B.E.n.A. FILE SECTION FOILABLE Y-N

GWH/a:labok2.ftc

bcc: R. Cozzy/G. Heitzman

file: 130042/NCFTC/Grant Correspondence

130042 Nassau County FTC Grant Correspondence

JOHN M. WALTZ, P.E.

COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

April 18, 1994

Mr. George Heitzman, P.E. New York State Department of Environmental Conservation Municipal Projects Section 50 Wolf Road Albany, New York 12233-7010 B.E.R.A.

FOILABLE Y-N

SITE NAME
SITE CODE
SUB SECTIONS
PRO. ELEMENT
OPERABLE UNIT NO. DESC.
DRAFT OR FINAL

B.E.R.A.

FILE SECTION
II
II
IV
VI

RE: Fireman's Training Center - Remedial Design Selection of Air Modelling Specialist

Dear Mr. Heitzman:

Camp Dresser & McKee proposes to retain the services of Dr. Gabriel Miller to perform the required air modelling services.

Please review the attached correspondence and advise this office as to whether this is acceptable. If you have any questions, please contact Kenneth G. Arnold at (516) 571-9600.

Very truly yours,

John M. Waltz, P.E.

Commissioner of Public Works

JMW: KGA: jm

Attachment

cc: James A. Oliva, Acting Head, Division of Sanitation and

Water Supply



CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 516 496-8400, Fax: 516 496-8864

April 8, 1994

Commissioner John M. Waltz Nassau County Department of Public Works 1 West Street Mineola, NY 11501

Subject:

Air Modeling Services: FTC

Dear Commissioner Waltz:

Camp Dresser & McKee (CDM) requests authorization to utilize the services of an air modeling specialist to provide air dispersion modeling for the projected air stripping tower at the Fireman's Training Center (FTC).

In keeping with the NYSDEC guidelines for sub-consultant services, CDM requested bids from 3 outside professionals

Name	<u>\$/hr fee</u>
Dr. Gabriel Miller	\$70
Dr. Walter Hoydysh	\$80
Dr. Morris Trichon	\$120

Because of the urgency of determining the need for vapor phase controls early in the design, air modeling has been scheduled for the 1st or 2nd week of April to keep the project on track.

Based on a scope of work consisting of air modeling analysis and subsequent report preparation, three "not to exceed" bids were requested.

Unfortunately, at the last moment, Dr. Walter Hoydysh withdrew his bid, leaving the two remaining bids:

Dr. Miller at an upper limit of	\$7,500
Dr. Trichon at an upper limit of	\$10,400

CDM has selected Dr. Miller for the work, and requests authorization. Discussions with George Heitzman of the NYSDEC indicates that selection of the low bidder is likely to be acceptable, despite the last minute withdrawal of the third bid. The bid includes travel costs from California for Dr. Miller's associate Robert Onufer. Note that the travel costs will be shared with another ongoing CDM project.

Commissioner John M. Waltz April 8, 1994 Page 2

Should you have any questions, please call me.

Very truly yours,

CAMP DRESSER & McKEE

mal maine

Mark Maimone, P.E. Project Task Leader

Attachments

cc: M. Memoli

P. Witkowski, NCDPW

(m18/waltz)



March 30, 1994

Mr. Mark Maimone Camp Dresser & McKee 100 Crossways Park West Woodbury, NY 11797

Dear Mr. Maimone:

Flarding Lawson Associates is pleased to submit this bid for the air modelling study to be performed for the emissions from the fire-nan's training center in Nassau County, NY. The purpose of the study is to estimate air quality impacts in the vicinity of the site caused by the installation of an air stripper. The modelling will be based on utilizing USEPA models ISCST2 and/or complex 1.

Based on the scope of work sent on March 22, 1994, Harding presents the following bid. Based on a an hourly rate of \$120/hr our bid for the effort including computer time is \$10,400.

If you require additional information, please feel free to call.

Very truly yours

Harding Lawson/Associates

Morris Trichon, Ph.D. Vice President/Director Air Quality Services

DR. GABRIEL MILLER 4 WASHINGTON SQUARE VILLAGE NEW YORK, NY 10012 (212) 614-0104

March 30, 1994

Mr. Mark Maimone Camp Dresser & McKee 100 Crossways Park West Woodbury, NY 11797

Dear Mr. Maimone,

Thank you for this opportunity to bid on the air modelling study for the Firemen's Training Center in Nassau County, NY. As per your description of the effort we are prepared to begin air modelling immediately for the air stripper to be installed at the site.

We will utilize the latest EPA approved models, ISCST2 and/or Complex1 and will utilize meterological data from LaGuardia Airport and Atlantic City,NJ (upper air data) to characterize the ambient conditions at the site.

Based on the scope of work sent to us by you we present the following bid. Our charge for professional services is \$70/hr. plus costs incurred for travel. We will bill against a not to be exceeded upper limit of \$7500.

If you require additional information please call at the above referenced telephone number.

Sincerely.

Gabriel Miller, PhD

R. Correspondence

APR 13 1994

Mr. John M. Waltz, P.E. Commissioner of Public Works County of Nassau Mineola, New York 11501-4822

Dear Mr. Waltz:

Re: Nassau County Fire Training Center (Site #130042) EQBA Title 3 Grant Contract Amendment

Enclosed for your review and County Executive's signature are seven copies of the contract amendment for the Remedial Design phase of the above-referenced project. Please return the signed and notarized contracts to my attention, along with seven copies of Resolution # 1124-1993, authorizing the Executive to enter this contract. One copy of the resolution should be certified as being an authentic copy of the original.

Note that the estimate of RI/FS completion costs is based on the recently-submitted payment request, which has not been reviewed for cost eligibility. Any disallowed costs from the RI/FS phase will be rebudgeted for design contingencies and/or construction costs.

If you have any questions about these contracts, please contact Mr. George Heitzman, P.E., of my staff, at (518) 457-1641.

Sincerely,

Michael J. O'Toole, Jr. Director Division of Hazardous Waste Remediation

Enclosures

cc: P. Witkowski, NCDPW

GWH/a:transmit.ftc bcc: M. O'Toole (2)

C. Goddard

S. Hammond

R. Cozzy/G. Heitzman

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CONTRACT AMENDMENT NUMBER ONE TO NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 1986 ENVIRONMENTAL QUALITY BOND ACT TITLE 3 INACTIVE HAZARDOUS WASTE DISPOSAL SITES REMEDIATION PROGRAM STATE ASSISTANCE CONTRACT

SITE NAME: Nassau County Fire Training Center

PROJECT NO.: 1-30-042

MUNICIPALITY: County of Nassau

COUNTY: Nassau

This CONTRACT AMENDMENT NUMBER ONE entered into the last day written by and between the New York State Department of Environmental Conservation (hereinafter "the Department"), acting for and on behalf of the State, and The County of Nassau (hereinafter "the Municipality"), TO THE CONTRACT entered into on January 26, 1990, binds the parties as follows:

WITNESSETH

WHEREAS the parties hereto entered into a prior contract which was duly assigned Contract No. C300052 by the Comptroller of the State of New York; and

WHEREAS the parties desire to amend said contract; and WHEREAS, the Department is authorized by Section 27-1313 and Article 52 of the New York State Environmental Conservation Law (hereinafter the "ECL") to enter into contracts on behalf of the State to provide State Assistance, as defined in Section 1 of this Contract.

Now, therefore, the parties agree that Contract Number C300052 is hereby revised as follows:

1) Delete Paragraph 2.a. and replace with the following:

2. State Assistance

- a. The Commissioner agrees to reimburse the Municipality on a periodic basis for its costs in conducting the Remedial Investigation/Feasibility Study and Remedial Design undertaken as a part of the Project as described in the Proposal, in an amount not to exceed Three Million, Sixty Six Thousand and Seventy Dollars (\$3,066,070), which amount has been determined by the Commissioner to be 75% of the estimated Eligible Cost of such project; provided that, such reimbursements shall not constitute State Assistance and shall be refundable by the Municipality to the Department where:
 - the work undertaken and performed by the Municipality is not an Approved Activity,
 - ii) all work necessary to implement and develop the inactive hazardous waste disposal site remedial program is not completed as approved by the Department.
- 2) Schedule A, "Proposal" and Schedule B, "Payment Schedule" are amended by Schedules Al and Bl which are attached hereto and hereby incorporated.

- 3) Delete Paragraph 14 and replace with the following:
 - 14. <u>Term and Effective Date</u>: The term of this contract shall start on February 9, 1989. This Contract shall end on March 31, 1995. This contract will be effective upon approval and filing by the State Comptroller in accordance with Section 112 of the State Finance Law.
- 4) This Contract Amendment will be effective upon approval and filing by the State Comptroller in accordance with Section 112 of the State Finance Law.
- 5) Except as specifically modified herein, all terms and conditions of said prior Contract including any intervening amendments remain in full force and effect.

In witness whereof, the parties have signed this Contract on the date indicated opposite each signature. The signatory for the Department provides the following Agency Certification: "In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract."

State of New York)	
County of Nassau)	
	MUNICIPALITY:
Dated:	Ву:
	(Title)
On this day of personally came sworn, did depose and say the	of, 19, before me
seal of said political subdi- instrument is such seal; that	ted the above instrument; that (s)he knows the vision; that the seal affixed to said to it was so affixed by order, resolution or of said political subdivision and that authority.
	Notary Public
FOR DIVISION	FOR DEPARTMENT
Ву:	Ву:
Title:	Title:
Dated:	
Approved as to form:	Approved:
By: Attorney General	By: State Comptroller
Date:	Date:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 1986 ENVIRONMENTAL QUALITY BOND ACT TITLE 3 INACTIVE HAZARDOUS WASTE DISPOSAL SITE REMEDIATION PROGRAM STATE ASSISTANCE GRANT CONTRACT

SCHEDULE A1: PROPOSAL

State Assistance Contract Project #1-30-042

Municipality: County of Nassau

County: Nassau

General Purpose:

The general purpose of this project is to undertake all activities necessary to complete the remedial program required by the Order on Consent signed between the State of New York and the County of Nassau.

General Scope:

The general scope of work to be accomplished under this State Assistance Contract is divided into the three stages required by the Title 3 State Assistance application guidance.

Stage I: Remedial Investigation and Feasibility Study (RI/FS)

The RI/FS will involve all tasks necessary to determine the site conditions, the environmental impact of the site, and to utilize this data to develop the appropriate remedial actions. Specific tasks include: site characterization, marsh/wetlands investigation, development of alternatives, screening of alternatives, post-screening field work, detailed analysis of alternatives, remedy selection, data validation, and citizen participation.

Stage II: Remedial Design (RD)

The scope of the RD activities will include all engineering designs, plans, specifications and contract documents necessary to implement the selected remedial action as defined by the RI/FS Record of Decision.

Stage III:Remedial Action Construction and Construction Oversight (RA)

The scope of RA activities will include all those activities necessary to construct and implement the selected remedial action.

General Cost estimates:

The estimated completion cost of Stage I is \$ 2,325,711.30. This estimate is based on unreviewed payment requests submitted for the RI/FS phase. The estimated cost of Stage II is \$ 1,762,382. This estimate is based on the engineering services contract and force account proposals for the Remedial Design phase.

<u>Original</u>

Stage I:RI/FS	Initial estimated cost Amendment #1 adjustment Net estimated cost (100%) Net contract amount (75%)	\$ \$ \$	3,144,000.00 (818,288.70) 2,325,711.30 1,744,283.50
	Amendment #1: Remedial Design		
Stage II:RD	<pre>amendment #1 estimated cost estimated contract amount (75%)</pre>	\$ \$	1,762,382.00 1,321,786.50
Stage III:RA	estimated total cost estimated grant amount		Be Determined Be Determined
	<u>Total</u>		
	Original estimated cost Net amendment #1 cost estimate Total estimated cost Total contract amount (75%)	\$ \$ \$	3,144,000.00 944,093.30 4,088,093.30 3,066,070.00

Stage:	Time:	Dates:
Stage I	48 months	February 1989 - February 1993
Stage II	24 months	March 1993 - March 1995
Stage III	18 months	April 1995 - October 1996

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 1986 ENVIRONMENTAL QUALITY BOND ACT TITLE 3 INACTIVE HAZARDOUS WASTE DISPOSAL SITE REMEDIATION PROGRAM STATE ASSISTANCE GRANT CONTRACT

SCHEDULE B1: PAYMENT SCHEDULE

State Assistance Contract Project #: 1-30-042

Municipality: County of Nassau

County: Nassau

Requests for payment will be submitted on a quarterly basis (every three months). An initial payment request may be made upon notification of approval and filing of this Contract by the Office of State Comptroller, to reimburse eligible costs accumulated between the date of execution of the Order on Consent and the date of execution of this Contract. No reimbursement payments will be released to the Municipality by the State until a Project Management Plan as described in Section 7(c) of the Contract has been submitted and approved by the Department.

Initial payment requests for Stages II & III may be submitted at the end of the quarter in which the State Assistance Contract Amendments are executed. Reimbursement will never exceed the total Contract amount.

A Five percent (5%) retainage will be withheld from all payment requests until the completion of the Stage in which the work task was completed and accepted. Retainages will be released when the following milestones are met:

Milestone:

Retainage Release:

Stage I: Approval of Final RI/FS Report (including responsiveness summary) or completion of the IRM; whichever occurs later.

Release of Stage I Retainage

Stage II:
Approval of Final Design
Specifications, Plans
and Bid Documents

Release of Stage II Retainage

Stage III:
Final DEC inspection and
approval of As-Built
drawings

Release of Stage III Retainage

NASSU COUNTY FIRE TRAINING CENTER REMEDIAL DESIGN BUDGET

17.81 \$	2137 0 712 16171 2137 1781 1425 427 285	27285	\$ 2137 0 712 16171 2137 1781 1425 427 285 427 285
T-2 # hours	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1532	T-2 # hours 120 0 40 908 120 100 80 24 16 100
24.38 \$	5266 0 1463 22917 2926 3413 3511 780 0 585 3169	44030	\$ \$ 5266 0 1463 22917 2926 3413 3511 780 0 585 3169
T-3 # hours	216 0 60 940 140 144 32 0 130	1806 13%	T-3 # hours 216 0 60 940 120 144 32 0 24 130
17.88	0 0 715 15806 1073 1430 1788 1073 1430 3934	44700	\$ 0 0 715 15806 1073 1430 1788 1073 1430 3934 17451
P-1 # hours	0 0 40 884 60 80 100 60 80 220 976	2500 18%	P-1 # hours 0 0 40 884 60 80 100 60 80 220 976
24.59	12344 0 1967 27492 2459 2951 3934 2951 3541 15787	76377	\$ \$12344 0 1967 27492 2459 2951 3934 2951 3951 3541 15787
P-2 # hours	502 0 80 1118 120 120 120 144 642	3106 22%	P-2 # hours 502 0 80 1118 100 120 120 120 144 642
33.2 \$	14741 398 12218 49900 5312 6906 10292 2656 2656 9894	119088	\$ 14741 398 12218 49900 5312 6906 10292 2656 2656 2656 2656 4117
P-3 # hours	444 12 368 1503 160 208 310 80 298 124	3587 26%	P-3 # hours 444 12 368 1503 160 208 310 80 80 298 124
45.44 \$	3,453 - 1,999 9,270 1,000 1,908 1,091 - 10,088 2,181	31717	\$ 3,453 1,999 9,270 727 1,000 1,908 1,908 2,181
P-4 # hours	76 204 42 22 22 48 48	869 5%	P-4 # hours 76 0 44 204 16 22 24 0 0 222 48
Description	Bioventing Pilot & Design Capping of Shallow Soils On-Site Extraction Design On-Site Treatment Off-Site Extraction Design Off-Site Recharge FS Long Term Monitoring Plan Groundwater Sampling Administration		Description Bioventing Pilot & Design Capping of Shallow Soils On-Site Extraction Design On-Site Extraction Design Off-Site Extraction Design Off-Site Recharge FS Long Term Monitoring Plan Groundwater Sampling Administration Alternative Designs
Task#	- 7 c 4 c o / 8 c 2 t		Task 1 2 3 4 4 7 10 10 10 11

CDM Subtotal	425,777 9,938 60,809 587,335 49,111 58,899 79,486 28,241 42,662 100,363 263,240	1,705,860	CDM Subtotal 425,777 9,938 60,809 587,335 49,111 58,899 79,486 28,241 42,662 100,363 263,240	
Fixed Fee	19920 473 2743 25987 2158 2595 3504 1321 1793 4403	76480	Fixed Fee 19920 473 2743 25987 2598 3504 1321 1793 4403 11583	2
Subcontract Costs	292000 8000 0 122000 2000 2000 5000 1000 15000 3000	556600	Subcontract Costs 292000 8000 0 122000 2000 2000 5000 1000 15000 3000	
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Grand Total	433,213 9,938 69,798 611,144 55,004 70,804 79,486 28,241 44,831 100,363	1,769,633	Grand Total	433,057	69,158 607,604	54,427	79,034	28,241	44,785	100,363	266,281	1,762,374
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Fringe/ Indirect	4494 0 5434 14391 3562 7195 0 0 1311 0	38547	Fringe/ Indirect	0 0	5047 12252	3213	0 0	0	1284	0	1838	34159
Total DPW Dir. Labor	2941 0 3556 9418 2331 4709 0 0 858	25227	Total DPW Direct Labor	2880	3303 8018	2103	904	0	840	0	1203	22355
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Description	Bioventing Pilot & Design Capping of Shallow Soils On-Site Extraction Design On-Site Treatment Off-Site Extraction Design Off-Site Recharge FS Long Term Monitoring Plan Groundwater Sampling Administration		Description	Bioventing Pilot & Design Capping of Shallow Soils	On-Site Extraction Design On-Site Treatment	Off-Site Extraction Design	Off-Site Recharge FS	Long Term Monitoring Plan	Groundwater Sampling	Administration	Alternative Designs	
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environmental engineers, scientists, planners, & management consultants

April 12, 1994

CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 516 496-8400, Fax: 516 496-8864

Commissioner John Waltz Nassau County Department of Public Works One West Street Mineola, NY 11501

Subject:

Technical Typing Services

MBE/WBE

Dear Commissioner Waltz:

In an April 12, 1994 letter, Camp Dresser & McKee proposed to use contour graphics, Inc. a certified WBE firm, to provide technical typing services for the Fireman's Training Center Remedial Design project. Unfortunately, Contour Graphics has been unable to provide a technical typist at their proposed hourly rate of \$15.00.

In accordance with State and County guidelines, we had solicited 3 bids. Copies of the written bids are attached. We now request approval to proceed to the second lowest bidder, TSI, at an hourly rate of \$18.00 Pending County authorization, we will begin to use TSI for all technical typing related to the project.

Very truly yours,

CAMP DRESSER & McKEE

Michael A. Memoli, P.E.

Senior Associate

cc: G. Heitzman, NYSDEC

(m13/waltz2)

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OFFICE SUPPORT PERSONNEL

TEMPORARY SOLUTIONS, INC. 50 EAST 42nd STREET, SUITE 208 NEW YORK, NEW YORK 10017 (212) 557-4078 557-4146 FAX

February 15, 1994

Camp Dresser McKee 100 Crossway Park W. Woodberry, N.Y. 11797

Attention: Denise Taggart

Dear Ms. Taggart:

As per our conversation on February 15, 1994, our bid for a word processor 5.1, and filing will be \$18.00 per hour.

If you have any further questions, please do not hesitate to call me.

Sincerely,

Miriam Hernandez Office Manager



New York State Department of Economic Development

Division of Minority & Women's Business Development One Commetce Plaza Albany, New York 12245 618 474-6346

FAX: 518 473-0665

January 24, 1994

File # 4945

Ms. Pearl M. Hedgspeth, President Temporary Solutions, Inc. 50 E 42nd Street, Suite 208 New York, NY 10017

Dear Ms Hedgspeth:

This is sent to confirm your inquiry relating to your continued certification as a Minority Woman-owned Business Enterprise. Your firm was originally certified by this Office on May 24, 1989.

Be advised that your certification remains in effect for a period of generally two years from the date of your original letter, or until such time as you are contacted by this office for recertification.

Please keep in mind that any changes which affect ownership, managerial, and/or operational control must be reported to this office within 30 days of the occurrence of such changes. These may include changes in the company name, business address, telephone numbers, principal products/services and bonding capacity. Failure to submit any changes to your business could result in your firm's certification status being revoked and the name of your firm removed from the Directory. You will be notified by this office when it is ready to begin recertification.

If your certification status is questioned by any public or private entity, you may direct the inquiry to this office for further clarification. Should you have any questions regarding this matter, you may contact me at (518) 474-3733.

We wish you continued success in your future endeavors.

Sincerely

Eloisa Pérez-Spencer

Intake/Records Management Supervisor

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FROM METCALF EDDY-NYO

TO 5574146

PAGE, 002

6-212-64605



CITY OF NEW YORK DEPARTMENT OF BUSINESS SERVICES

110 William Street, New York, NY 10038 Telephone: (212) 513-6300 ` Fax: (212) 618-8989

WALLACE L. FORD II COMMISSIONER

August 10, 1992

PEARL M HEDGSPETH PRESIDENT TEMPORARY SOLUTIONS INC 50 BAST 42ND STREET, SUITE 208 NEW YORK, NY 10017

ID# 112726275

Dear PEARL HEDGSPETH:

The Department of Business Services, Division of Economic and Financial Opportunity. ("DBS/DEFO") has completed its review of your application for certification as a Minority & Woman Owned Business Enterprise and has determined that your firm meets the eligibility requirements pursuant to chapter 2, Section 2-02 of the rules governing the Minority and Woman-Owned Business Enterprise Certification Program.

The attached sheet contains the principal products or services that your business will be listed under the New York City Minority and Woman Owned Business Enterprise ("M/WBE") Directory of Certified Businesses. Your certification status is not intended to imply that the City of New York guarantees your company's capability to perform on contracts, nor does it imply that your company is guaranteed any City business.

This certification remains in effect only for the period during which your firm is certified as an MWBB. with the New York State Governor's Office of Minority and Women-Owned Business Enterprise ("NYS GOMWBD") your original certifying governmental entity or until such time as you are notified that your business has been solected by this Office for recertification. Please remember that any changes in your company that affect ownership, managerial and/or operational control must be reported to DBS/DEFO within thirty (30) days of such changes; including changes of company name, business address, telephone numbers, principal products/services, and bonding capacity.

Thank you for your cooperation. On behalf of the City of New York, I wish you luck in your business endeavors, particularly in those involving City agencies.

Very truly yours,

Sleve

Ccleste Glenn

Acting Director

Filo

rent



THE CITY OF NEW YORK

OFFICE OF THE MAYOR

CHECTOR A

OFFICE OF ECONOMIN AND FINANCIAL OPPORTUNITY 17 JOHN STREET : (A NEW YORK N.Y. 10038) TELEPHONE (212) 518-547

December 18, 1990

Ms. Pearl Headspeth Temporary Solutions, Inc, 50 East 42nd Street, Suite 208 New York, New York 10017

Ro: Small Business Enterprise Program
Certification (Commercial Service)

Dear Ms. Headspeth:

Please be advised that <u>Temporary Solutions</u>, <u>Inc.</u>, which provides temporary personnel placement services, has been certified as the state of the services business Enterprise by the New York City Office of Economic and Financial Opportunity. Your name will be added to a listing of certified Small Business Enterprises, which will be distributed among New York City agencies.

This certification expires as of December 18, 1993.

Should you have any questions concerning your certification, please contact the Small Business Enterprise Program office at (212)513-6474.

Sincerely,

Lloye d. Mair

Certification Analyst

LCM/gf

coi Celeste Glenn

TEMPSATIONS

TEMPORARY WORD PROCESSING AND CLERICAL PERSONNEL

Old Chelsea Station P.O. Box 201 New York, N.Y. 10011

(212) 255-9435

February 16, 1994

Ms. Denise Taggart Camp, Dresser & McKee 100 Crossway Park West Woodbury, New York 11797

Re: Bid for Word Periect Secretary

Dear Denise:

Thank you for the opportunity to bid on your job order!

As I understand it, the specifics are as follows: Word Perfect secretary who will type, file and occasionally answer the phone. The job will last a minimum of 2 years and the hours will be 8am-5pm daily. I also understand that you would like to interview 2 or 3 candidates before making a decision. I believe I can safely say that we can supply the required temp for \$22.00/hour.

Please remember that our service is satisfaction guaranteed. If you are unhappy with our temp for any reason, there is no charge.

I look forward to your favorable response and to a mutually beneficial working relationship. Thank your for your kind and prompt attention to this matter.

Sincerely,

Elizabeth Dobrick

President

February 1, 1994

Ms. Denise Taggart Camp, Dresser & McKee 100 Crossway Park West Suite 415 Woodbury, NY 11797

Dear Ms. Taggart:

Pursuant to our conversation on 2/1/94, Contour Graphics, Inc. (CGI), is pleased to submit the price quote outlined below to provide a word processor in your Woodbury office for a period of one to two years, with no price increase should the project extend to two years.

One Word Processor (40 hours/week)

S15/hour

As we discussed, CGI would place an advertisement in a Woodbury-area newspaper, soliciting resumes for this position. Upon my review, I would select five potential candidates and submit these resumes to you for your review and approval. Subsequent to your approval, the interview process by CGI and Camp, Dresser & McKee could be conducted either separately or at the same time.

Thank you for the opportunity to submit this price quote to Camp, Dresser & McKee. If I can be of any service or answer any questions you may have, please contact me at your convenience.

Very truly yours,

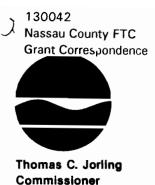
CONTOUR GRAPHICS, INC.

Linda L. Roland, CPS

President

LLR/tmv

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 7, 1994

County of Nassau Att'n: Owen B. Walsh, Esq. Chief Deputy County Attorney Nassau County Executive Building 1 West Street Mineola, NY 11501

> RE: Nassau County Fire Training Center inactive hazardous waste disposal site # 130042

Dear Mr. Walsh:

Please refer to my letter dated January 24, 1994, to you, in which I requested certain information pertinent to the captioned matter by no later than the close of business, March 25, 1994.

As of the date hereof, I have received neither the information requested, nor an explanation why the same could not be timely provided.

Please take notice that this Department considers Nassau County to be in default of its obligations under the State Assistance Contract by its failure to respond to my January 24, 1994 letter. I hereby afford Nassau County 60 days from the date of this letter to cure this default. If it does not do so, the Department will pursue whatever remedies are available under law.

Nothing herein contained affects in any way the County's obligation to accomplish the remediation of the captioned site according to the terms of the order, and nothing herein contained affects in any way the Department's rights to compel the County's compliance with the order and/or to penalize its noncompliance with the order.

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Very truly yours,

Charles E. Sullivan, Jr.

Mulhrain 2

Chief

Bureau of Inactive Hazardous Waste Site Enforcement

cc: E. Gail Suchman

4/1/94

Nassau County FTC
Grant Correspondence
Reimbursement Rates
For Direct Salary Costs
Year Ending June 30, 1994

Standby Contract

		Professional Responsibility Levels		Labor Classification	Average Reimbursement <u>Rates (\$/Hr)</u>	Maximum Reimbursement Rates (\$/Hr)
45.44	PH	IX	1	See Page	47.71	47.71
		VIII		2-12.8	42.90	46.33
33.20	P3	VII			35.59	39.19
A		VI			32.21	35.81
		V			26.60	29.33
	PZ	IV*			24.91	27.71
		III*			20.30	23.20
		II*			18.27	20.46
		I*			15.51	17.54
13.65	CI	Admin/Support*			15.39	17.22

Footnotes:

- 1) These rates will be held firm until July 1, 1994.
- 2) Reimbursement will be limited to the lesser of either the individuals actual hourly rate or the maximum rates for each labor category.
- 3) Reimbursement will be limited to the maximum reimbursement for the professional responsibility level of the actual work performed.
- 4) Only those labor classifications indicated with an asterisk will be entitled to overtime premium.
- Reimbursement for technical time of principals, owners and officers will be limited to the maximum reimbursement rate of that labor category, the actual hourly labor rate paid, or the State M-6 job rate, whichever is lower.
 - The maximum rates in each labor category can be modified only by mutual written agreement and approval by both the Department and the Comptroller.
 - Maximum reimbursement rates may be exceeded for work assignment activities that are under the jurisdiction of Schedule of Prevailing Wage Rates set by the New York State Department of Labo..
- Si** If the U.S. cost-of-living index increases at a rate greater than 5% compounded annually, to maximum salary rates will be subject to renegotiation for future years of the contract. there shall be no retroactive adjustments of payment as a result of renegotiated salary schedules.
- Footnates to Schodules for years 4 thru Tions

Schedule 2.10(a) Reimbursement Rates For Direct Salary Costs Year Ending June 30, 1995

Professional Responsibility Levels	Labor Classification	Average Reimbursement Rates (\$/Hr)	Maximum Reimbursement Rates (\$/Hr)
IX	See Page	50.09	50.09
VIII	2-12.8	45.05	48.64
VII		37.37	41.15
VI		33.82	37.60
V		27.93	30.80
IV*		26.15	29.10
III*		21.32	24.36
II*		19.18	21.49
I*		16.28	18.42
Admin/Support*		16.16	18.09

Footnotes:

- 1) These rates will be held firm until July 1, 1995.
- 2) Reimbursement will be limited to the lesser of either the individuals actual hourly rate or the maximum rates for each labor category.
- 3) Reimbursement will be limited to the maximum reimbursement for the professional responsibility level of the actual work performed.
- 4) Only those labor classifications indicated with an asterisk will be entitled to overtime premium.
- Reimbursement for technical time of principals, owners and officers will be limited to the maximum reimbursement rate of that labor category, the actual hourly labor rate paid, or the State M-6 job rate, whichever is lower.
- The maximum rates in each labor category can be modified only by mutual written agreement and approval by both the Department and the Comptroller.
- Maximum reimbursement rates may be exceeded for work assignment activities that are under the jurisdiction of Schedule of Prevailing Wage Rates set by the New York State Department of Labor.
- B)** If the U.S. cost-of-living index increases at a rate greater than 5% compounded annually, the maximum salary rates will be subject to renegotiation for future years of the contract. there shall be no retroactive adjustments of payment as a result of renegotiated salary schedules.
- footnotes to Schedules for years 4 thru? only

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NASSAU COUNTY FIREMAN'S TRAINING CENTER REMEDIATION COST ESTIMATE COST ESTIMATE (current average rate; 5% mark-up on all aubcontractors; 5% fixed fee; 1.749 overhead)

PROJECT: FIREMAN'S TRAINING CENTER
LAST REVISED: 11 - Aug - 93

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NASSAU COUNTY FIREMAN'S TRAINING CENTER REMEDIATION COST ESTIMATE COST ESTIMATE SCENARIO 1 (current average rate; 5% mark-up on all subcontractors; 5% fixed fee; 1.749 overhead)

PROJECT: FIREMAN'S TRAINING CENTER
LAST REVISED: 11-Aug-93

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CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 496-8400, Fax: 496-8864

March 16, 1994

Mr. George W. Heitzman, P.E. Senior Environmental Engineer Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 50 Wolf Road Albany, NY 12233

Subject: FTC Technical Typing Services

Dear Mr. Heitzman:

Camp Dresser & McKee (CDM) is proposing to use Contour Graphics, Inc., a certified WBE firm, to perform technical typing services for the Fireman's Training Center Remedial Design project. In a February 23, 1994 letter to Commissioner Waltz of Nassau County, Contour Graphics was shown to be the low bid for these services.

It is estimated that these services will total approximately \$10,000 over the life of the project, or approximately 600 hours. CDM will use these services exclusively for the preparation of design reports, specifications, and technical documents directly related to the design activities.

Contour Graphics will log the hours worked on the FTC project and assign CDM job numbers to those hours worked. The job numbers enable CDM to identify which task within the project required the services of the technical typist. Invoices will be submitted only for those hours directly billable to the FTC project for technical typing services.

CDM will continues to strive to meet MBE/WBE goals. Using Contour Graphics will help us to meet these project goals.

Very truly yours,

CAMP DRESSER & McKEE

rnal marmae

Mark Maimone Task Leader

(m14/heitz)

Remedial Design

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233



February 24, 1994

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center (Site #130042)
Groundwater Effluent Standards

Enclosed are the effluent standards and monitoring requirements for Nassau County's proposed discharge of treated groundwater to an off-site recharge basin. These are provided for use in preparing the design of the groundwater treatment system and are based on a discharge rate of 1500 gpm. General Conditions for the discharge authorization to be granted pursuant to the Order on Consent will be forwarded at a later date.

Please call me at (518) 457-1641 if you have any questions about this.

Sincerely,

George W. Heitzman, P.E.

Senior Environmental Engineer Division of Hazardous Waste

Remediation

cc: M. Memoli (CDM)

GWH/a:effstds.ftc

bcc: A. Shah

R. Cozzy/G. Heitzman

file: 130042/NCFTC/Remedial Design

130042 Nassau County FTC **Grant Correspondence**

environmental engineers, scientists, planners, & management consultants

February 23, 1994

CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 516 496-8400, Fax: 516 498-8864

Commissioner John Waltz Nassau County Department of Public Works One West Street Mineola, NY 11501

Subject:

Technical Typing Services

MBE/WBE-

Dear Commissioner Waltz:

rot eligible
"Technical Typing
Above , beyond conting Combined M/WISE youls

Camp Dresser & McKee proposes to use contour graphics, Inc. a certified WBE firm, to provide technical typing services for the Fireman's Training Center Remedial Design project.

In accordance with State and County guidelines, we have solicited 3 bids, awarding the contract to the low bid. Copies of the written bids are attached. Pending County authorization, we will begin to use Contour Graphics, Inc. for all technical typing related to the project.

Very truly yours,

CAMP DRESSER & McKEE

Michael A. Memoli, P.E. Senior Associate

cc: G. Heitzman, NYSDEC

(m13/waltz2)

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work plan

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MAR - 4 1994

February 1, 1994

Ms. Denise Taggart Camp, Dresser & McKee 100 Crossway Park West Suite 415 Woodbury, NY 11797

Dear Ms. Taggart:

Pursuant to our conversation on 2/1/94, Contour Graphics, Inc. (CGI), is pleased to submit the price quote outlined below to provide a word processor in your Woodbury office for a period of one to two years, with no price increase should the project extend to two years.

One Word Processor (40 hours/week)

\$15/hour

As we discussed, CGI would place an advertisement in a Woodbury-area newspaper, soliciting resumes for this position. Upon my review, I would select five potential candidates and submit these resumes to you for your review and approval. Subsequent to your approval, the interview process by CGI and Camp, Dresser & McKee could be conducted either separately or at the same time.

Thank you for the opportunity to submit this price quote to Camp, Dresser & McKee. If I can be of any service or answer any questions you may have, please contact me at your convenience.

Very truly yours,

CONTOUR GRAPHICS, INC.

Linda L. Roland, CPS

President

LLR/tmv

New York State Department of Economic Development

Division of Minority & Women's Business Development 1515 Broadway New York, New York 10036 212 827-6266

FAX: 212 827-6293

July 12, 1993

Federal ID#: 04-3134159

Ms. Linda L. Roland Contour Graphics, Inc. 660 White Plain Road, Suite 400 Terrytown, NY 10591

Dear Ms. Roland:

On behalf of New York State, the Department of Economic Development, Division of Minority and Women's Business Development (D/MWBD) has completed its review of your application for State certification as a Woman-owned Business Enterprise and has determined that your firm meets eligibility requirements pursuant to Executive Law, Article 15-A.

We are pleased to inform you that the firm of Contour Graphics, Inc. has been granted status as a Woman-owned Business Enterprise.

Your business will be listed in the State's Directory of Certified Businesses with the following list of principal products or services:

Word Processing and Secretarial Services (581 & 742)

Certification status is not intended to imply that the State of New York guarantees your company's capability to perform on contracts, nor does it imply that your company is guaranteed any State business.

This certification remains in effect for a period of two years from the date of this letter or until such time as you are selected by this Office for recertification. Please remember that any changes in your company that affect ownership, managerial and/or operational control must be reported to this Office within 30 days of such changes; including changes of company name, business address, telephone numbers, principal products/services, and bonding capacity. At such time as it is necessary for your company to be recertified, you will be notified by this Office.

If your certification status is questioned by any public or private entity, please direct the inquiry to this Office for clarification.

Thank you for your cooperation. On behalf of the State of New York, I wish you luck in your business endeavors, particularly in those involving State agencies.

Sincerely,

Al Bass

Assistant Director

Business Services Bureau

cc:

Phyllis Monaco Michael Searles Jose L. Escalera



CITY OF NEW YORK DEPARTMENT OF BUSINESS SERVICES

110 William Street, New York, NY 10038 Telephone: (212) 513-6300 Fax: (212) 618-8989

WALLACE L. FORD II COMMISSIONER

December 22, 1993

ID: 161251288

Ms. Linda Roland President Contour Graphics, Inc. 660 White Plains Road, Suite 400 Tarrytown, NY 10591

RE: Woman Owned Business Certification

Dear Ms. Roland:

The Department of Business Services, Division of Economic and Financial Opportunity ("DBS/DEFO") has completed its review of your application for certification as a Woman Owned Business Enterprise and has determined that your firm meets the eligibility requirements pursuant to Chapter 2, Section 2-02 of the rules governing the Minority and Woman Owned Business Enterprise Certification program.

The attached sheet contains the principal products or services that your business will be listed under in the New York City Minority and Woman Owned Business Enterprise ("M/WBE") Directory of Certified Businesses. Your certification status is not intended to imply that the City of New York guarantees your company's capability to perform on contracts, nor does it imply that your company is guaranteed any City business.

This certification remains in effect only for the period during which your firm is certified as an M/WBE with the New York State Governor's Office of Minority and Woman Owned Business Enterprise ("NYS GOMWBD"), your original certifying governmental entity, or until such time as you are notified that your business has been selected by this office for recertification. Please remember that any changes in your company that affect ownership, managerial and/or operation control must be reported to DBS/DEFO within thirty (30) days of such changes; including changes of company name, business address, telephone numbers, principal product/services, and bonding capacity.

Thank you for your cooperation. On behalf of the City of New York, I wish you luck in your business endeavors, particularly in those involving City agencies.

Celeste Glenn Director

cc: Jeanette Ruiz, Assistant Commissioner

THE PORT AUTHORITY OF MYS MJ

One World Trade Center New York N.Y. 10048

(212) 435-7000 (201) 961-6600

June 9, 1992

Ms. Linda Roland
President
Contour Graphics Inc.
1 Barker Avenue
White Plains, NY 10601

RE: WBE CERTIFICATION
TYPE OF WORK
WORD PROCESSING

Dear Ms. Roland:

This is to acknowledge receipt of the Schedule A which your firm submitted. You have been included on our roster of eligible Minority Business Enterprises (MBEs) and Women Business Enterprises (WBEs) for contracts of The Port Authority of New York and New Jersey.

Please be advised that the Port Authority's Office of Business and Job Opportunity periodically reviews all certifications and reserves the right to decertify any previously certified firm that no longer meets the Port Authority's guidelines for MBE/WBE designation.

Additionally, any MBE/WBE whose business changes in any substantial manner must notify the Port Authority within thirty days of that change. These changes include, but are not limited to, a change of officers, directors, location, corporate name, or financial condition. Failure to advise us of these changes may result in our removing the firm from our roster of eligible MBEs/WBEs. Should you have any questions regarding your certification, please feel free to contact Charles Haynes at (212) 435-6505.

Sincerely yours,

Earle(J/ Walker

Manager, Operational Support

and Compliance

Office of Business and Job

Opportunity

CH/prb

cc: C. Haynes, E. Walker, C. Wallace

emc: P. Carmody

Writer's direct disineleptriche

TSI

OFFICE SUPPORT PERSONNEL

TEMPORARY SOLUTIONS, INC. 50 EAST 42nd STREET, SUITE 208 NEW YORK, NEW YORK 10017 (212) 557-4078 557-4146 PAX

February 15, 1994

Camp Dresser McKee 100 Crossway Park W. Woodberry, N.Y. 11797

Attention: Denise Taggart

Dear Ms. Taggart:

As per our conversation on February 15, 1994, our bid for a word processor 5.1, and filing will be \$18.00 per hour.

If you have any further questions, please do not hesitate to call me.

Sincerely,

Miriam Hernandez Office Manager FEB-16-94 NED 10:11 TEMPSHT10NS

TEMPSATIONS

TEMPORARY WORD PROCESSING AND CLERICAL PERSONNEL

Old Chelsea Station P.O. Box 201 New York, N.Y. 10011

(212) 255-9435

Fr - 121 -2

February 16, 1994

Ms. Denise Taggart Camp, Dresser & McKee 100 Crossway Park West Woodbury, New York 11797

Re: Bid for Word Perfect Secretary

Dear Denise:

Thank you for the opportunity to bid on your job order!

As I understand it, the specifics are as follows: Word Perfect secretary who will type, file and occasionally answer the phone. The job will last a minimum of 2 years and the hours will be 8am-5pm daily. I also understand that you would like to interview 2 or 3 candidates before making a decision. I believe I can safely say that we can supply the required temp for \$22.00/hour.

Please remember that our service is satisfaction guaranteed. If you are unhappy with our temp for any reason, there is no charge.

I look forward to your favorable response and to a mutually beneficial working relationship. Thank your for your kind and prompt attention to this matter.

Sincerely,

Elizabeth Dobricki

President



New York State Department of Environmental Conservation

MEMORANDUM

TO: FROM: SUBJECT: George Heitzman, Municipal Projects Section & CEd Califano, Projects Administration Unit

Force Account - Nassau Co. Fire Training Center (Site # 1-30-042)

DATE:

FFB 22 1994

Per your request dated February 15, 1994, the following are my comments on Nassau County's force account proposal for the Design phase of the above-referenced project:

- In general, has a technical and program review been performed on this proposal? That is, are all the Title 3 requirements contained in the guidelines which are pertinent to force account work been addressed? Many of these requirements are not reviewed by this office.
- 2. The most important requirement for a force account proposal is to establish that the work can be accomplished more economically by the Force Account method and on a timely basis. This proposal did not address this requirement.
- 3. Is there adequate insurance?
- 4. Is the scope of work detail sufficient?
- Are there any costs involved (e.g., equipment, supplies, materials, etc.) besides the Direct Labor? None are contained in this proposal.
- 6. Are the Municipal Employee's competent for Hazardous Waste Work, i.e., have they met OSHA's Inactive Hazardous Waste Site Training? This was not indicated in this proposal.
- 7. Salary rates are questionable. The Project Manager must establish (based on resumes, etc.) the titles submitted to equivalent Title 3 titles so rate determinations can be performed.
- 8. Timekeeping proposal via Task Codes segregating eligible vs. ineligible activities is acceptable.
- 9. It appears that the Fringe and Indirect rates submitted are equivalent to a 2.528 multiplier rate which would be acceptable.

Overall, if this document is the entire force account proposal; it appears to be insufficient. Please contact me at 5-8403 if you have any questions or problems.

cc: B. Cozzy
D. Weigel
L. Hallett

B.E.R.A. FOILABLE Y-N	FILE SECTION
SITE NAME SITE CODE SUB SECTIONS	FEB 2 2 10
MATERIAL DESC.	

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS

FIREMAN'S TRAINING CENTER NYS SUPERFUND GRANT FORCE ACCOUNT WORK

The Nassau County Department of Public Works, Division of Sanitation and Water Supply, Hazardous Waste Unit, is comprised of technical and scientific personnel who are health and safety trained, and who are enrolled in a medical surveillance program per all federal, state and local regulations. Civil, Sanitary and Chemical Engineering disciplines and hydrogeological expertise allow the Hazardous Waste Unit to conduct, in-house, all phases of soil/groundwater investigations from initial response to final design. Administrative staff are available to assist with report preparation and related tasks.

Personnel currently employed by the Hazardous Waste Unit first became involved with the Fireman's Training Center in 1985, when, during the performance of field studies for various site improvements, several areas of subsurface contamination were first identified. These same employees have continued work at the site subsequent to these initial discoveries and therefore are the most perpetually cognizant of historical and technical developments with regard to the site. Working closely with Camp Dresser & McKee, the consultant selected via appropriate procurement procedures, these employees provide data collection and interpretation, field inspection, monitoring, design services and such duties as are required to accomplish the tasks of the Design phase work.

The Nassau County Department of Public Works believes that the employees of the Hazardous Waste Unit can provide timely, complete and economical services at the Fireman's Training Center, as they possess the skills and experience required by the scope of this project. Resumes and proof of 40-hour, OSHA-mandated health and safety certification for the Unit's personnel may be provided upon request, as will proof of enrollment in an annual medical monitoring program.

OMB CIRCULAR A-87 COGNIZANT AGENCY

NEGOTIATION AGREEMENT

Page 1 of 2

Department of Public Works Date: October 15, 1991

County of Nassau

Mineola, New York Filing Ref: May 18, 1989

The indirect cost rates contained herein are for use on grants and contracts with the Federal Government to which Office of Management and Budget Circular A-87 applies, subject to the limitations contained in the Circular and in Section II, A, below.

SECTION I: RATES

<u>Type</u>	Effecti From	ve Period To	Rate	Base
<u>Final</u> : Sanitation - Fringe Benefit Sanitation - Indirect Cost Sanitation - Fringe Benefit	1/1/87	12/31/87 12/31/87 12/31/88	56.90% 56.31% 57.8 4 %	(a) (b) (a)
Sanitation - Indirect Cost	1/1/88	12/31/88	60.18%	(b)

Basis for Application

- (a) Direct salaries and wages.
- (b) Direct salaries and wages including fringe benefits.

<u>Treatment of Fringe Benefits</u>: Fringe benefits, including vacation, holiday, sick and administrative leave, applicable to direct salaries and wages are included in the fringe benefits rate.

SECTION II: GENERAL

A. LIMITATIONS: The rates in this Agreement are subject to any statutory and administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the Department/Agency or allocated to the Department/Agency by an approved cost allocation plan were included in the indirect cost pool as finally accepted; such costs are legal obligations of the Department/Agency and are allowable under governing cost principles; (2) The same costs that have been treated as indirect costs have not been claimed as direct.

CONSULTANT/CONTRACTOR DETAILED EEO AND MBE/WBE WORKPLAN NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

					es (1)	WBE (1) EEO-Minorities
					es (1)	3
initials	init	oved	ved date disapproved	date approved		pro
		•	Affirmative Action Use Only	of .	r the Office	For
4,450	14	40	8.* EEO Combined Totals	341,180 8	20 .	4. MBE/WBE Combined Totals
4,000	10	29	7.* Total Goal for Female Employees	85,300	5	3. WBE Goal Applied to the Contract
450	4	11	6.* Total Goal for Minority Employees	255,880	15	to the Contract
13,851	35	100	Total Work	1,705,862	100	of the Prime Contract
Wk/Hrs	No./Empl	•		amount	percent	
	-		edial Design	Remedial Design	Center Site	Fireman's Training Center Site
as de			ç	Dobar cmen		contract description
7	Stanstans	or kzod	ing Commissioner authority	Litle Acting		authorized representative John M. Waltz
code 1501	2 ip	state New York		City		address One West Street
unber '	project/grant number	projec				grantee name Nassau County
code 797	zip c	state New York	Woodbury	city Wood	3t	address 100 Crossways Park West
	contract number	contra			Camp Dresser	consultant/contractor name

^{*} Estimates only - depends on actual bid

SECTION I.- NDE INFORMATION: In order to Achieve the MBE Goals, MINORITY Firms are Expected to Participate in the Following Manner:

	Description of work				
MBE Firm	Quantities Involved By MBE	Contract Amount and Award Date	Schedule Start Date	Contract Payment Schedule	Project Completion Date
Nanik Massand, P.C.	Surveying				-
211-12 Union Tpk.		\$ 17,000		Unit price	Oct 1994
Bayside		(estimated)	November 1993		000 1004
NY 11364		Date:		determined	
telephone number: (718) 464-3979		November 1993			
Name: Savin Engineers P.C.	Structural Design				
200 White Plaine Rd					
	•	\$_150.00	November 1993	Init price	06+ 199/
State/zip code:		(estimated)			
NY 10591		November 1993		determined	
(914) 332-4830					
address:					
city:		Date:			
state/zip code:					
celephone number:					
ı					-

; : .

SECTION II.- WHE INFORMATION: In order to achieve the WHE Goals, WOMEN Firms are expected to Participate in the Following Manner:

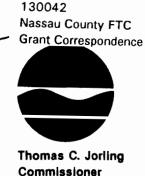
WBE FIRH	Description of Work Quantities Involved by WBE	Projected WBE Contract Amount and Award Date	Contract Schedule Start Date	Contract Payment Schedule	Project Completion Date
Name: National Reprographics	Printing		Dec. 1993	As needed by	Oct. 1994
Address: 44 W 18th Street		\$ 15,000 (estimated)		invoice	
Clty: NY		Date: Dec. 1993			
State/Zip Code: NY 10011					
Telephone Number: 212-366-7000					
Name: Contour Graphics Inc	Technical typing		Oct. 1993	As needed by	Oct. 1994
Address: 660 White Plains Rd #400		\$ 30,000 (estimated)		invoice.	
Clty: Tarrytown, NY		Date: Oct: 1993			
St ¶\$ e/Zlp ₁ 6g∯g:	•				
Telephone Number: (914) 631-2720					
	³ Drilling		Oct. 1993	Unit price to	Oct. 1994
Address: 97 Union Ave PO Box 1309		\$ 30,000 (estimated)		be determined	
Clty: Ronkonkoma		Date: Oct. 1993			
State/21p Code:					
Telephone Number:					

=

SECTION III.-EEO INFORMATION: In order to Achieve The EEO Goals, Minorities and Females are Expected to be Employed in the Following Job Categories for the Specified Amount of Work Hours:

,						
Total Work Hours of Contract	All Em Males	ployees Females	Black	Minor Asian	Native American II	Mispanio
690	690	0	0	0	0	0
9,193	6000	3193	0	0	0	0
3,338	3088	50	50	50	0	100
0	0	. 0	0	0	0	0
. 630	0	630	0	0	0	0
0	0	0	0	0	0	0
0.	0	0	0	0	. 0	0
0	0	0	0	0	0	0
13,851	9,778	3,873	50	50	0	100
	Estimates for CDM staff only Total Work Hours ob Categories of Contract ficials/ inagers ofessional 9,193 chnicians 3,338 les Workers 0 fice/Clerical 630 borers 0 rvice/ rkers 13,851	Mork Hours Males 690 690 690 9,193 6000 3,338 3088 3088 0 0 0 0 0 0 0 0 13,851 9,778	Mork Hours Hales Males Males 9,193 6000 690 690 690 690 690 690 690 690 69	Work Hours Intract All Employees Black Females Bla	Work Hours All Employees Minor mtract Males Females Black Asian 690 690 0 0 0 9,193 6000 3193 0 0 3,338 3088 50 50 50 630 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 3,338 3088 50 50 50 630 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 13,851 9,778	Work Hours All Employees Minor Ity Hants 690 690 0 0 0 0 9,193 6000 3193 0 0 0 3,338 3088 50 50 50 50 630 0 0 0 0 0 0 0 0 0 0 0 13,851 9,778 3,873 50 50

Attachment #1



February 13, 1994

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center (Site #130042)
Municipality/Consultant Contract

Upon review of the Nassau County's contract with CDM, DEC's Contract Development Section has determined that the terms of your contract are not consistent with our standby contract with CDM. In order to determine the indirect rate and profit factor that will be eligible for EQBA reimbursement, the enclosed Indirect Cost Rate Schedule should be prepared.

DEC will continue preparing the State Assistance Contract based on the initial estimate of consultant costs. If a portion of the indirect cost or profit is found to be ineligible, it will be disallowed at payment and rebudgeted.

Please call me at (518) 457-1641 if you have any questions.

Spincerely,

George W. Heitzman, P.E.

Senior Environmental Engineer Division of Hazardous Waste

Remediation

cc: M. Memoli (w/enclosure)

GWH/a:.ftc bcc: A. Shah

R. Cozzy/G. Heitzman

file: 130042/NCFTC/Remedial Design

Section D. Indirect Cost Rate Schedule (Form #5)

This form must be filled out in order to receive reimbursement for your consultant's reasonable overhead costs. It is based on costs which are common to most engineering firms. The schedule is divided into five (5) general categories - labor overheads, general and administrative overheads, unallowable costs, credits, and New York State adjustments. Labor overheads are payroll associated costs. General and administrative overheads include all other indirect costs not associated with labor. Unallowable costs are those costs which are specifically excluded by the Federal government under 48 CFR Part 31 acquisition regulations. Credits are cost reductions applicable to allowable costs and are frequently accounted for as items of miscellaneous income. The New York State adjustments relate to those costs which are considered ineligible for reimbursement. The indirect cost rate schedule must be prepared on an accrual basis.

If the indirect cost rate schedule is prepared on a cash basis, reimbursement will be limited to a 2.5 multiplier, which includes profit.

Attached to the form is a copy of the Federal acquisition regulations and instructions pertaining to New York State unallowables.

Name of Firm:	Page 1 of
Indirect Cost Rate Schedule - Fiscal Year Ending	
Account Description	Total Indirect Costs
A. Labor Overheads FICA State Unemployment Insurance Federal Unemployment Insurance Workers Compensation Insurance NYS Disability Insurance Sickness & Accident Insurance Hospital Insurance Group Life Insurance Dental Insurance Pension Salaries - Sick Leave Salaries - Holiday Salaries - Vacation Other - Specify Profit Sharing Bonuses Other - Specify Deferred Profit Sharing E.S.O.P. Daycare	
Total - Labor Overheads B. General & Administrative Overheads	
Indirect Labor Professional Liability Insurance	
General Liability Insurance Automobile Insurance Property Insurance Other Insurance - Specify	
Property Taxes NYS Franchise Tax Federal Income Tax Other Taxes - Specify	
Depreciation - Office Furniture & Equipment Depreciation - Field Equipment Depreciation - Vehicles	
Depreciation - Buildings Other Depreciation - Specify Amortization - Leasehold Improvements Other Amortization - Specify	
Rent - Building Rent - Vehicles Rent - Equipment Other Rent - Specify	
Outside Services - Legal Outside Services - Accounting Other Outside Services - Specify Computer Expense	
Conference/Convention Expense Dues Subscriptions Professional Licenses	

Books/Journals Postage/Express Printing

Recruiting Expenses Repairs & Maintenance

·	raye 2 of
Account Description	Total Indirect Costs
B. General & Administrative Overheads (cont'd)	
Office Supplies Telephone/Telex Travel & Per Diem Advertising Bad Debts Contributions Entertainment Keyman Life Insurance Interest Expense Miscellaneous Supplies - Clerical & Stationery Supplies - Engineer./Drafting Brochures/Newsletters Other - Specify	
Total - G&A Overheads	
C. Unallowable Costs per 48 CFR31 Advertising 31.205-1 Bad Debts 31.205-3 Contributions & Donations 31.205-8 Entertainment Costs 31.205-14 Fines & Penalties 31.205-15 Excess IR&D/B&P Costs 31.205-18 Interest & Other Financial Costs 31.205-20 Lobbying Costs 31.205-22 Losses on Other Contracts 31.205-23 Organization Costs 31.205-27 Rental Costs in Excess of Costs of Ownership Between Organizations Under Common Ownership or Control 31.205-36 Federal Income Taxes 31.205-41 Goodwill 31.205-49 Other Unallowable Costs Per 48 CFR31 - Specify	

D. Credits per 48 CFR 31.201-5
Gain on Sale of Assets
Equipment Rental Revenues
Laboratory Revenues
Computer Service Revenues
Markups on Related Inter-Company
Transactions
Insurance Recoveries
Real Property Rental Revenues
Other Credits Relating to Allowable
Costs - Specify

Total - Credits

Account Description	Total Indirect Costs
E. New York State Adjustments Incentive compensation in excess of 10% employees annual base salary Pension Costs in Excess of 6.19% of Total Allowable Salaries Salaries in Excess of \$81,600/year Other Costs not allocable to professional consulting activities - Specify	
Total - State Unallowables	
Calculation of Indirect Cos	t Rate
A. Total - Labor Overheads B. Total - G&A Overheads SUBTOTAL - Indirect Cost Rate Pool	
Less:	
C. Total - Unallowable Costs D. Total - Credits E. Total - State Unallowables F. Net - Indirect Cost Rate Pool	
G. Total Direct Salaries	
H. Indirect Cost Rate (F - G)	/ // _/

Instructions to New York State Adjustments:

- 1. Incentive compensation in excess of 10% employee's annual base salary All incentive compensation in excess of 10% of an employee's annual base salary is unallowable. Incentive compensation includes but is not limited to deferred compensation, profit sharing, and bonuses. The amount of excess incentive compensation is to be calculated on an individual basis and not in the aggregate. Each individual's annual base salary is to be compared to each person's incentive compensation. If any person received incentive compensation in excess of 10% of their annual base salary, an adjustment to the indirect cost rate pool must be made. The excess for all individuals must be totaled and included on Form #5 page 3 as a cost reduction.
- 2. Pension costs in excess of 6.19% of total allowable salaries Pension costs in excess of 6.19% of total allowable salaries is unallowable. Pension costs include but are not limited to employee stock ownership plans (ESOPs), 401K, and other defined benefit plans or defined contribution plans.
- 3. Salaries in excess of \$81,600 All salaries in excess of \$81,600/year are unallowable. The amount of the excess is to be calculated on an individual basis and not in the aggregate. Each individual whose salary was in excess of this rate must be allocated between that person's direct and indirect time based on actually hours spent. Since the specific individuals are identifiable for computing this adjustment, calculations may not be allocated on a company's overall direct and indirect labor.
 - All of the excess will be assumed to be indirect unless the individual has direct labor in excess of \$81,600 which is supported by time records showing actual direct and indirect time.
- 4. Other costs not allocable to professional consulting activities Many consulting firms have costs relating to non-engineering business activities. These costs include such things as computer services, office leasing and management, and laboratory analysis. Costs generated by non-engineering activities are not allowable and must be excluded from the firm's indirect cost pool.



CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 516 496-8400, Fax: 516 496-8864

9 11

February 10, 1994



Mr. George Heitzman NYSDEC 50 Wolf Road Albany, NY 12233

Subject: Fireman's Training Center Borehole Drilling by Delta Well & Pump Co. Inc.

Dear Mr. Heitzman:

Camp Dresser & McKee proposes to retain the services of Delta Well & Pump Co. Inc. to perform the installation of soil borings at the proposed recharge basin site for the Fireman's Training Center (FTC) remediation program.

Delta Well & Pump is certified as a WBE and was previously used at FTC to install soil borings and wells for the bioventing pilot study. Work at the recharge basin location is tentatively scheduled for the week of February 28, 1994, barring any weather related problems.

1 week April

Should you have any questions or comments, please contact Mark Maimone or myself at our Woodbury, New York office.

Very truly yours,

CAMP DRESSER & McKEE

Michael Memoli

Project Manger/Senior Associate

cc:

M. Maimone

D. Keil

M. Flaherty

P. Witkowski

pw/FTC



New York State Department of Environmental Conservation

MEMORANDUM

TO:

Bob Cozzy

FROM:

Dave Smith THRU Jack McKeon

SUBJECT:

Nassau County FTC (Site #1-30-042)

DATE:

FEB 9 1994

Returned herewith is the engineering services contract between Nassau County and CDM.

Your memo of December 29, 1993 states that "CDM has claimed that the terms of this contract are identical to their standby contract with DEC". Ralph's cursory review quickly found on page 3 - the overhead (indirect) costs are not the same and on page 4 software costs listed in this contract as a direct cost is included in the standby as indirect.

Thus, please advise Nassau County and CDM that they should prepare and submit the standard Title 3 Form #5, Indirect Cost Rate Schedule.

Once the forms are submitted, we will review them and factor in applicable information we have in the CDM standby contract in our determination of their indirect cost rate.

Please note, we are not following subcontract management fees on Title 3 contracts.

cc: R. Burger

FEB - 9 190A

B.E.S.A.	THE RESERVE OF THE PROPERTY OF
FOILABLE Y-N	FILE SECT
SITE NAME	
SITE CODE	APPROVE A
TO SECTIONS TO PAOLELEMENT	9,401.1.4
ANGERGIA UNU NO DESC	
For all talk filed.	****
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THIS AGREEMENT made by and between the COUNTY OF NASSAU a municipal corporation having its principal offices at One West Street, Mineola, New York 11501, (hereinafter referred to as the "County"), and Camp Dresser & McKee, having its principal offices at 100 Crossways Park West, Woodbury, New York 11797, (hereinafter referred to as the "Consultant").

WITNES SETH:

WHEREAS, the Consultant is a professional partnership, adequately staffed with personnel, consisting of engineers, architects and scientists, highly skilled and experienced in the performance of structural, environmental and sanitary engineering, hydrogeological and architectural services; and

WHEREAS, the County Commissioner of Public Works

(hereinafter referred to as the "Commissioner") has

recommended that the Consultant be retained for the purpose

of rendering structural, environmental, sanitary engineering

and architectural services for the remediation of soil and

groundwater contamination at the Fireman's Training Center in

Old Bethpage, New York, upon the terms and conditions

hereinafter provided; and

WHEREAS, the Consultant is familiar with the Federal and State requirements for the investigation and remediation of soil and groundwater contamination, and is familiar with the hydrogeology of Long Island; and

WHEREAS, the services of the Consultant constitute personal services within the intent and purview of Section 2206 of the County Government Law of Nassau County;

NOW, THEREFORE, the parties hereto mutually agree as follows:

BASIC SERVICES OF CONSULTANT:

SCOPE OF SERVICES:

Subject to the direction and control of the Commissioner, the Consultant agrees to perform all the usual and necessary engineering services in connection with the soil and groundwater remediation required for the preparation of biddable design plans and specifications in accordance with the terms of the Consent Order dated February 9, 1989 (copy attached). The detailed outline of services and associated budget estimates per job task are attached as Attachment No. 1.

II. PERIOD OF SERVICE:

Services under this Agreement shall commence upon written authorization of the Commissioner and shall be performed in accordance with the schedule set forth in the Consent Order dated February 9, 1989. Services shall be considered complete upon furnishing the final plans and specifications suitable for acceptance by the Commissioner and appropriate regulatory agencies.

III. FEES FOR SERVICES:

- A. In consideration of the services to be rendered as described in this Agreement, the County and the Consultant mutually agree to the ostablishment of a contract cost ceiling in the amount of \$1,705,862.
- B. The method of payment shall be the total aggregate amount of items 1, 2, 3, 4 and 5 described below, subject to

the cost ceiling limitations set forth above. Monthly partial payments to the Consultant shall be calculated and invoiced on the basis of the sum of the following items:

- 1. Direct Labor Cost actual wages or salaries paid to the professional and technical personnel of the Consultant's staff (exclusive of payroll taxes, insurance and all other employee benefits).
- 2. Overhead (indirect costs): equal to the Direct Labor Cost times 1.749.
- 3. Other direct costs as described in paragraph D below at actual cost.
- 4. A profit equal to the sum of the total Direct Labor Cost plus Overhead, all times a factor of 5%.
- 5. Invoiced amounts of sub-consultants' services, plus an administrative fee of 5%. The 5% administration fee is only applicable for sub-consultants' cost over \$10,000.00.
- C. Sub-consultants engaged by the Consultant shall be compensated on a similar basis as provided herein for technical employees and principals of the Consultant. The following sub-consultants are approved as part of this Agreement:
 - Envirogen/Vapex
 - Energy & Environmental Engineering Inc.
 - Mellick-Tully and Associates
 - Nanik Massand, P.C.
 - Savin Engineering, P.C.

Prior to engaging any additional outside sub-consultants not previously listed, the Consultant shall first obtain the written permission from the Commissioner.

The estimated sub-consultant cost, see Attachment 1, may not be exceeded without written approval of the Commissioner.

1466

5%

- D. The Consultant and approved sub-consultants shall be further reimbursed for the following other Direct Costs incurred in the interest of the provisions of this Agreement:
- 1. Transportation and living expenses for travel beyond a 50-mile radius from the job site, with prior written approval of the Commissioner, and at rates prescribed for County employees in like circumstances. Travel and living expenses related to travel between the offices of the Consultant and the Fireman's Training Center site, shall not be paid to the Consultant.
- 2. The cost of other services as may be required hereunder but which are not normally included as part of the overhead of the Consultant. Such other services as required to complete this Agreement may include, but are not limited to, the following:

Software costs, printing costs, reproduction costs, telephone (except to area codes 212, 718, 516, 201, 203 or 914), telegraph costs, shipping, laboratory and testing services, and special equipment.

- E. Premium pay for overtime, over and above the straight hourly rate, shall not be subject to any multipliers. In computing the cost to the County for overtime work performed, the overtime shall be paid at the straight hourly rate times the indirect cost multiplier, plus the actual premium overtime cost incurred.
- F. Payment of the Consultant's fee for services rendered shall be made monthly upon presentation of claim forms supplied by the County Comptroller and approved for payment by the Commissioner, or his authorized representative. Each claim form shall be accompanied by a certified statement signed by the

Consultant, setting forth the name and title of each person who was engaged in each separate project during each month, his hourly rate of pay, the number of hours worked, the amount of compensation earned, and the statement that the billing is for technical services only.

G. The Consultant shall maintain full and complete books and records of accounts in accordance with accepted accounting practices, and such other records as may be prescribed by the Comptroller of the County of Nassau. Such books and records shall be retained for a period of six (6) years from the final payment, and shall at all times during normal business hours and upon reasonable notice be available for audit and inspection by the County Comptroller, his duly designated representative, or any other public agency having jurisdiction of work performed hereunder.

IV. MISCELLANEOUS PROVISIONS:

- ment as Attachment No. 2 is a schedule entitled "Maximum Wage Rate Schedule" listing the various job titles of the personnel to be used on this project, and the maximum hourly wage rate currently in effect for each job title. Said schedule shall be deemed to be a part of this Agreement. Where appropriate, increases to the "Maximum Wage Rate Schedule" may be made at the option of the Commissioner on a yearly basis. All requests for increases shall be made between November 1 and December 15, to become effective January 1 of the following year. In no event shall an employee's wage rate exceed the maximum rate for their classification.
- B. <u>Claims for Payment</u> With respect to any claim for payment submitted for unreal schary costs, the certified statement to be attached to such claim form, as herein provided, shall further recite that the hourly wage rate listed for each

of the personnel named in said certified statement, was the prevailing hourly wage rate for such employee at the time of the commencement of the project. If any employee so listed had received an increase in his wage rate, the Consultant shall certify that such increase did not exceed the amount authorized by the Commissioner for the employee's job classification.

- C. <u>Insurance</u> <u>Consultant's Responsibilities</u> This

 Agreement shall be void and of no effect unless the Consultant shall provide Certificates of Insurance, and keep in full force and effect during the life of the Agreement the following:
 - 1. Commercial/General Liability Insurance, WHICH NAMES THE COUNTY AS AN ADDITIONAL INSURED, in an amount not less than \$2,000,000 aggregate.
 - 2. Professional Liability Insurance in an amount not less than \$3,000,000 aggregate.
 - 3. Workers' Compensation for the benefit of such employees as are necessary to be so insured in order to comply with provisions of the New York State Workers' compensation Law.

All proofs of insurance coverage must contain not less than twenty (20) days written "Notice of Cancellation" clauses, and shall be delivered upon signing of this Agreement.

D. The Consultant further agrees to comply with any and all applicable provisions of the laws of the State of New York, the County of Nassau, and all local government agencies. The Consultant agrees to defend, indemnify, protect, and save harmless the County, its employees, agents and officers from and against any and all losses, damages, detriment, suits, claims cost and expense for injuries (including death) to persons or damage to property arising out or or in connection with the performance of work hereunder which is directly or indirectly caused by or resulting from the errors, omissions, or negligence of the Consultant, its employees, agents, or any sub-consultant

retained by the consultant herein.

- E. The County reserves the right to postpone, delay, suspend or terminate the services of the Consultant at any time and for any reason deemed to be in the interest of the County. In such event, the Consultant shall be paid such sum as shall be determined to be due and owing as of the date of such termination, plus all reasonable costs for demobilization. Such postponement, delay, suspension or termination shall not give rise to any cause of action against the County for damages or for extra remuneration. If a project is reactivated, the Consultant's fee may be re-negotiated.
- F. It is agreed that the Consultant at all times shall be deemed to be an independent contractor, and shall not in any manner whatsoever, by any action or deeds, commit the County to any obligation irrespective of the nature thereof, and the Consultant shall not at any time, or for any purpose, be deemed an employee of the County.
- G. It is further understood and agreed that no agent or employee of the Consultant shall, at any time, or under any circumstances, be deemed to be an agent or employee of the County.
- H. This Agreement, or any part thereof, shall not be assigned, transferred, or sublet without the written consent and approval of the County Executive.
- I. The Consultant warrants that it is not in arrears to the County upon debt or contract, and is not a defaulter as surety, contractor, or otherwise.
- J. This Agreement is made subject to the provisions of Article 18 of the General Municipal Law of the State of New York, as amended, and Section 22-4-2 of the Administrative Code of Nassau County, and the provisions of the Anti-discrimination Order of Nassau County.
 - K. Indemnity Notwithstanding any other provision

contained herein to the contrary, it is specifically agreed and understood that the Consultant shall be entitled to the protection offered by the provisions of Chapter 536 of the New York laws of 1987.

- L. Innovative Technology The County recognizes that the selected remedy for the Fireman's Training Center bioventing will involve the use of innovative technologies or processes that do not have a proven track record of performance. However, these technologies or processes provide a remediation alternative with limited by-products which will reduce the overall negative impact on the environment, and may reduce overall program costs. As a result, notwithstanding the provisions of Article IV, D and L, of this Agreement, the Consultant shall be liable only for its gross negligence in the performance of its services with regard to the ability of the technologies or processes to achieve water quality standards. For all other services, the provisions of Article IV, D and L will apply.
- M. Proprietary Information Notwithstanding any other provision of this Agreement between Consultant and County or any provisions contained in the scope of work, all of Consultant's pre-existing or proprietary computer programs, software, materials or information developed by Consultant outside of this Agreement shall remain the exclusive property of Consultant.
- N. Manifest Signing County shall be responsible for the long-term storage and disposal of waste materials generated as a result of sampling, pilot testing, and/or monitor well construction and development. Consultant or Consultant subcontractor(s) shall place such waste materials in containers for temporary storage on-site consistent with industry practice, and in full compliance with all Federal, State and local laws and regulations. County shall sign any and all required manifests relating to the transportation, storage, treatment,

generation and disposal of all wastes associated with this Agreement.

- O. Status of Consultant Nothing contained in this
 Agreement shall be construed or interpreted as requiring
 Consultant to assume the status of a generator, storer, treater,
 transporter or disposal facility as those terms appear within
 the Resource Conservation and Recovery Act, 42USCA, Section
 6901, et seq. (RCRA), or within any state statute of similar
 effect governing the generation, storage, treatment,
 transportation or disposal of water.
- P. Cost Control/Opinions of Construction Cost Opinions of probable construction cost, financial evaluations, feasibility studies, economic analyses of alternative solutions and utilitarian considerations of operations and maintenance costs prepared by Consultant hereunder will be made on the basis of Consultant's experience and qualifications and represent Consultant's best judgment under this Agreement. However, since Consultant has no control over the cost of labor, materials, equipment or services furnished by others, or over any contractor(s) methods of determining prices, or over competitive bidding or market conditions, Consultant cannot and does not guarantee that proposals, bids or actual construction costs will vary from Consultant's opinions.
- Q. Standard of Care The standard of care for all professional engineering and related services performed or furnished by Consultant under this Agreement will be the skill and care ordinarily used by members of Consultant's profession practicing under similar conditions at the same time and in the same locality. Consultant makes no warranties, express or implied, under this Agreement or otherwise, in connection with Consultant's services.
- R. Invalid Provisions If any provision of this Agreement is held to be invalid, the parties shall, to the maximum extent

possible, re-negotiate the provision to best represent the original intent of the parties. All other terms and conditions shall remain valid and fully enforceable.

IN WITNESS WHEREOF, the Consultant has executed this Agreement the 844 day of SEP7., 1993, and the County has executed this Agreement the $\sqrt{9}$ day of October, 1993.

COUNTY OF NASSAU

BY:_

A. McConald

Chief Debuty County Executive

CAMP DRESSER & MCKEE

DV. /

William S. Howard

Partner

APPROVED) AS TO

Chen B Wedeh

chief Deputy County Attorney

APPROVED:

John M. Waltz

acting Commissioner of Public Works

MS.A.

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STATE OF NEW YORK))ss.: COUNTY OF NASSAU day of ,1993, before On this me personally appeared THOMAS S. GULOTTA, County Executive of the County of Nassau, the municipal corporation described herein, and who executed the foregoing instrument, to me known and known to me to be such County Executive and he being by me duly sworn, did depose and say: That he is the County Executive of Nassau County; and that he executed the same as such County Executive for the purposes therein mentioned. NOTARY PUBLIC STATE OF NEW YORK))ss.: COUNTY OF NASSAU) On this 19 day of Octobers 1993, before me personally appeared Robert J. McDona Deputy County Executive of the County of Nassau, the municipal corporation described herein and who executed the foregoing instrument, to me known and known to me to be such Deputy County Executive, and he by me being duly sworn, did depose and say: That he is the Deputy County Executive of the County of Nassau and that pursuant to Section 205 of the County Government Law of Nassau County executed the same as such Deputy County Executive for the purposes therein mentioned. DOR'S GRIFFIN
NOTARY PUBLIC. State of New York
No. 30-465:659
Qualified in Nassau County
Commission Expires June 30, 19 STATE OF NEW YORK))ss.: COUNTY OF NASSAU) on this day of September, 1993, before me personally came William 5. Howard to me known, who , 1993, before being by me duly sworn, did depose and say: That he resides that he a partner in CAMP DRESSER & MCKEE, the partnership described in and which executed the aboys Agreement; and that he signed his name thereto by order its Articles of Partnership. STEPHEN P. CITO Motory Public State of Herr Jersoy LD. No. 2073573 Qualities in Hunterdon County My Comm. Expires March 29, 1995 NOTARY PUBLIC STATE OF NEW YORK)) ss.: COUNTY OF NASSAU) day of On this before me personally came to me known and known to me to be the person described in and who executed the same.

NOTARY PUBLIC

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ATTACHMENT NO. 2

MAXIMUM WAGE RATE SCHEDULE

CAMP DRESSER & MCKEE

1993

TITLE	MAXIMUM (\$/HR)
Project Manager	52.00
Project Engineer	44.00
Project Scientist	44.00
Engineer	31.00
Scientist	31.00
Designer	27.00
Draftsperson	21.00
Technician	21.00
Technical Typist	19.00

NASSAU COUNTY FIREMAN'S TRAINING CENTER REMEDIATION COST ESTIMATE (current average rate; 5% mark-up on all aubcontractors; 5% fixed fee; 1,748 overhead)

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LAST REVISED. 11-Aug-93

NASSAU COUNTY FIREMAN'S TRAINING CENTER REMEDIATION COST ESTIMATE COST ESTIMATE SCENARIO 1 (current average rate; 5% mark-up on all subcontractors; 5% fixed fee; 1.748 overhead)

PROJECT: FIREMAN'S TRAINING CENTER
LAST REVISED. 11 - Aug - 93

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NASSAU COUNTY FIREMAN'S TRAINING CENTER REMEDIATION COST ESTIMATE COST ESTIMATE SCENARIO 1 (current average rate; 5% mark—up on all subcontractors; 5% lixed fee; 1.749 overhead)

PROJECT: FIREMAN'S TRAINING CENTER
LAST REVISED: 11-Aug-93

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JOHN M. WALTZ, P.E.

ACTING COMMISSIONER

THOMAS S. GULOTTA
COUNTY EXECUTIVE



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

February 8, 1994

Mr. George Heitzman, P.E. New York State Department of Environmental Conservation Eastern Remedial Projects Section 50 Wolf Road Albany, New York 12233-4011

RE: Fireman's Training Center Subcontract Agreements

Dear Mr. Heitzman:

Please find enclosed one copy of executed Subcontract Agreements for Aquatec, Savin Engineers, PC., Envirogen and Envirex.

Subcontracts for Melick-Tully and Massand, P.C., are still pending. These will be executed in the near future, and copies will be forwarded.

Very truly yours,

?Peter J. Witkowski

Director of Hazardous Waste Services

PJW: KGA: jm

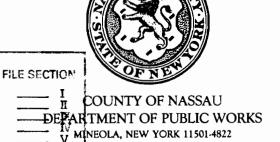
Enclosure

cc: James A. Oliva, Acting Head, Division of Sanitation and Water Supply (Without Enclosure)

THOMAS S. GULOTTA COUNTY EXECUTIVE

ECILABLE Y-N

A Commonster



-: 710

January 27, 1994

. IT NO. DESC.

B.E.F.A.

Mr. George Heitzman, P.E. New York State Department of Environmental Conservation Eastern Remedial Projects Section 50 Wolf Road Albany, New York 12233-4011

RE: Nassau County Fireman's Training Center (Site #130042)
State EQBA Grant Application
Design Phase Work

Dear Mr. Heitzman:

Please find enclosed two (2) copies of the additional information requested in your December 31, 1993 correspondence in regards to the Design Phase Grant Application.

If there are any questions concerning the information, please contact Kenneth G. Arnold at (516) 571-9600.

Very truly yours

John M. Waltz, P.E. Acting Commissioner of Public Works

JMW: KGA: jm

cc: Owen B. Walsh, Chief Deputy County Attorney Gail Suchman, Esq., Department of Law Walter Hennenberger Kevin Langberg, Special Assistant, Board of Supervisors

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS

FIREMAN'S TRAINING CENTER NYS SUPERFUND GRANT FORCE ACCOUNT WORK

The Nassau County Department of Public Works, Division of Sanitation and Water Supply, Hazardous Waste Unit, is comprised of technical and scientific personnel who are health and safety trained, and who are enrolled in a medical surveillance program per all federal, state and local regulations. Civil, Sanitary and Chemical Engineering disciplines and hydrogeological expertise allow the Hazardous Waste Unit to conduct, in-house, all phases of soil/groundwater investigations from initial response to final design. Administrative staff are available to assist with report preparation and related tasks.

Personnel currently employed by the Hazardous Waste Unit first became involved with the Fireman's Training Center in 1985, when, during the performance of field studies for various site improvements, several areas of subsurface contamination were first identified. These same employees have continued work at the site subsequent to these initial discoveries and therefore are the most perpetually cognizant of historical and technical developments with regard to the Working closely with Camp Dresser & McKee, the consultant selected via appropriate procurement procedures, these employees provide data collection and interpretation, field inspection, monitoring, design services and such duties as are required to accomplish the tasks of the Design phase A detailed breakdown by Title for the work anticipated work. is attached for your reference.

The Nassau County Department of Public Works believes that the employees of the Hazardous Waste Unit can provide timely, complete and economical services at the Fireman's Training Center, as they possess the skills and experience required by the scope of this project. Resumes and proof of 40-hour, OSHA-mandated health and safety certification for the Unit's personnel may be provided upon request, as will proof of enrollment in ana annual medical monitoring program.

The attached narrative outlines the background of the Hazardous Waste Unit Personnel as having the necessary skills and experience to safely and effectively accomplish the work, and do so in a timely fashion. The nature of the work to be undertaken by these employees precludes such oversight responsibilities from being assigned to other than County employees. We therefore request your approval for First Account Costs as outlined on the attached schedule entitled "Estimate of Force Account Costs".

Note
The following less ptions were not sufficiently detailed to justify a clear delineation between force account and consultant duties. Some were disallowed and some were returned for more explanation.

TITLE: Hazardous Waste Specialist II

TASKS:

- Bioventing Perform combustible gas surveys, evacuate on-site combustible gas pockets and monitor return of combustible gas.
- Groundwater Sampling Assist with design sampling program and perform water level round.

TITLE: Hydrogeologist III

TASKS:

- Bioventing Inspection of soil borings and monitoring probe installations. Perform combustible gas surveys, evacuate on-site combustible gas pockets and monitor return of combustible gas.
- 3. On-site G.W. Extraction Well
 - Design and Modeling Selection of this location for on-site extraction wells. Assist consultant modelers with the construction of the 3-D groundwater flow and contaminant transport model.
- 5. Off-site Extraction Well
 - Design Selection of locations of the off-site extraction wells. Coordinate design efforts with State Parks' personnel.
- Groundwater Sampling Assist with design sampling program and perform water level round.

TITLE: CHIEF ENVIRONMENTAL CHEMICAL ENGINEER

TASKS:

3.

On-site G.W. Extraction Well

Design - Assist with the selection of extraction well location, layout and detailed design of pumping system and piping.



On-site G.W. Treatment - Assist with the layout of unit processes, development of PID's, detailed process design.



Off-site Extraction Well

Design - Assist with the selection of extraction well locations, layout and detailed design of pumping systems and piping.

- 6. Off-site G.W. Treatment Assist with the layout of unit processes, development of PID's, detailed process design.
- 11. Bioreactor Design Assist with the interpretation of pilot study data, scale-up and detailed process design.

OMB CIRCULAR A-87 COGNIZANT AGENCY

NEGOTIATION AGREEMENT

Page 1 of 2

Department of Public Works

Date: October 15, 1991

County of Nassau Mineola, New York

Filing Ref: May 18, 1989

The indirect cost rates contained herein are for use on grants and contracts with the Federal Government to which Office of Management and Budget Circular A-87 applies, subject to the limitations contained in the Circular and in Section II, A, below.

SECTION I: RATES

Type	Effecti From	ve Period To	Rate	Base
Final: Sanitation - Fringe Benefits Sanitation - Indirect Cost Sanitation - Fringe Benefits Sanitation - Indirect Cost	1/1/87	12/31/87	56.90%	(a)
	1/1/87	12/31/87	56.31%	(b)
	1/1/88	12/31/88	57.84%	(a)
	1/1/88	12/31/88	60.18%	(b)

Basis for Application

- (a) Direct salaries and wages.
- (b) Direct salaries and wages including fringe benefits.

Treatment of Fringe Benefits: Fringe benefits, including vacation, holiday, sick and administrative leave, applicable to direct salaries and wages are included in the fringe benefits rate.

SECTION II: GENERAL

A. LIMITATIONS: The rates in this Agreement are subject to any statutory and administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the Department/Agency or allocated to the Department/Agency by an approved cost allocation plan were included in the indirect cost pool as finally accepted; such costs are legal obligations of the Department/Agency and are allowable under governing cost principles; (2) The same costs that have been treated as indirect costs have not been claimed as direct.

	N.Y.S. Superfun Estima	perfund Grant Eligibile Technical Services Estimate of Force Account Work	le Tecnnical Socount Work	ervices		
State Approved	Chief Env	Chief Environmental Chemical Engineer	Hydro	Hydrogeologíst III	Hazardo	Hazardous Waste Specialist II
Hourly Rate (1994)	\$4	\$40.09	\$	\$30.00	\$25	\$26.00
Tasks	Work Hours	Cost	Work Hours	Cost	Work Hours	Cost
1. Bioventing	0	\$0.00	70	\$2,100.00	30	\$780.00
2. Capping	0	\$0.00	0	\$0.00	0	\$0.00
3. Onsite G.W. Extraction Well Design						
(Modeling)	30	\$1,202.70	20	\$2,100.00	0	\$0.00
4. Onsite G.W. Treatment	200	\$8,018.00	0	\$0.00	0	\$0.00
5. Offsite Extraction Well Design	30	\$1,202.70	30	\$900.00	0	\$0.00
6. Offsite G.W. Treatment	100	\$4,009.00	0	\$0.00	0	\$0.00
7. Offsite Recharge Feasibility Study	0	\$0.00	0	\$0.00	0	\$0.00
8. Remediation Monitoring Plan	0	\$0.00	0	\$0.00	0	\$0.00
9. Groundwater Sampling	0	\$0.00	15	\$450.00	15	\$390.00
10. Miscellaneous Tasks	0	\$0.00	0	\$0.00	0	\$0.00
11. Bioreactor Design	30	\$1,202.70	0	\$0.00	0	\$0.00
SUBTOTAL	390	\$15,635.10	185	\$5,550.00	45	\$1,170.00
Fringe (57.84%)		\$9,043.34		\$3,210.12		\$676.73
Indirect Cost (60.18%)		\$14,851.49		\$5,271.84		\$1,111.36
TOTAL		\$39,529.93		\$14,031.96		\$2,958.09
			Force	Force Account Total:		\$56,519.98

PROPOSED METHOD OF TIMEKEEPING

In order to segregate eligible work from non-eligible work for the design phase of this project, a Task Code of 41 will be assigned for eligible work. All non-eligible work will be assigned a Task Code of 50 or 51. Task Codes are found on the Nassau County Timesheet where highlighted.

BOD FYI -> File! Nassau County FTC Grant Correspondence

Thomas C. Jorling

Commissioner

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233

January 24, 1994

County of Nassau
Att'n: Owen B. Wals

Owen B. Walsh, Esq.

Chief Deputy County Attorney

Nassau County Executive Building

1 West Street Mineola NY 11501

Re: NASSAU COUNTY FIRE TRAINING CENTER inactive hazardous

waste disposal site #130042

Dear Sir:

Nassau County's obligation to accomplish the remediation of the captioned site is provided for by a certain order, number D1-0022-88-03, and the payment to the County of State assistance toward the expense of discharging that obligation is provided for by a certain contract, number C300052, both of which have been in effect for more than three years.

Pursuant to paragraph V(b) of the order, not later than thirty days after February 9, 1989, the County was to have submitted all information in your possession with respect to all other persons constituting responsible parties for the captioned site. Upon reviewing this Department's records, I have been unable to find such a submittal. (Our records include a document produced by Malcolm Pirnie, Inc., dated April 1989 entitled "Response To Section V Of The Consent Order Pertaining To The Nassau County Fireman's Training Center"; however, it contains no information identifying responsible parties, and indeed section 1.0 indicates that the task was not within the scope of the document, in saying only that "Nassau County has requested Malcolm Pirnie to prepare a brief history and description of the site, the location and results of all sampling at the site and an historical inventory of all available aerial photography of the site".)

Pursuant to paragraph 3, (a)-(b), of the contract, the County is under a continuing duty to recover the expense of discharging your obligation from other responsible parties and to assist the Department in doing likewise, and to document your actions upon request.

Accordingly, the Department requests that the County provide all information in its possession with respect to all other persons constituting responsible parties for the captioned site. The term "responsible party" is presently defined in subdivision 375-1.3(u) of Title 6 of the Official Compilation of Code, Rules and Regulations of the State. For purposes of this inquiry, the term

specifically includes:

any person who or which donated or otherwise provided hazardous waste intended to be burned at the site in training exercises;

any person, including without limitation the United States government and /or Grumman Aerospace Corporation, who or which temporarily operated the site, by lease or license or otherwise, for conducting training exercises.

The Department requests to be provided with documentation of the steps which you have taken, from 1990 to the present, to recover your response costs from other responsible parties.

Please provide the County's reply to the foregoing not later than close of business March 25, 1994.

Thank you.

Very truly yours,

Charles E. Sullivan, Jr.

Chief

Inactive Hazardous Site Enforcement Bureau

cc: E. Gail Suchman

CS/JE/je/c 130042JE.001

bcc: J. Lacey, C. Sullivan, G. Heitzman, J. Eckl daybook, file

R. Cory/21 Identyme

130042 Nassau County FTC Grant Correspondence



Commissioner

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233

January 3, 1994

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center (Site #130042)

The New York State Department of Environmental Conservation (NYSDEC) has issued a new Record Keeping and Payment Guide Handbook for the Environmental Quality Bond Act of 1986 Title 3 reimbursement program effective November 1, 1993. In this document, there has a been a procedural change. The NYSDEC will only reimburse costs incurred by the municipality less than 365 days prior to the municipality submitting a voucher to the NYSDEC for reimbursement for these costs (see Section 2.1.C of Guide).

Costs incurred greater than one year ago will not be eligible for reimbursement. The NYSDEC is notifying Nassau County of this procedural change, and allowing a one-time 60 day period for which the Municipality can submit all costs incurred to date.

If you have any questions please contact me at (518) 457-1641.

Sincerely

George W. Heitzman, P.E.

Senior Environmental Engineer Division of Hazardous Waste

Remediation

GWH/a:payup60.ftc

bcc: R. Cozzy/G. Heitzman

E. Califano, PAU

B.E.R.A.	
FOILABLE Y-N	FILE SECTION
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PRO ELEMENT	
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130042 Nassau County FTC Grant Correspondence

Thomas C. Jorling

Commissioner

B.E.R.A.

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233 ->010

December 31, 1993

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Nassau County Fire Training Center (Site #130042)

FOILABLE Y-N

SUB SECTIONS

CHAFT OR FINAL

PRO ELEMENT OPERABLE UNIT NO. DESC.

SITE NAME

SITE CODE

In response to your December 21, 1993 application for State Assistance, DEC requests additional information regarding the application for Force Account funding. Also, DEC has developed a preliminary estimate of eligible costs to be included in the State Assistance Contract.

In accordance with Technical Information Pamphlet (TIP) #29 (enclosed), force account applications should contain the following:

A detailed description of the work proposed for force account work

List of tasks to be performed by each employee

Description of proposed method of time keeping (ie segregating force account FTC costs from non-eligible FTC costs)

Approved indirect cost rate agreement.

EQBA Title 3 Grant Application

This information should be provided for approval of force account costs. first two items should justify that NCDPW personnel will not duplicate tasks performed by County contractors. The last item should be the most recent fringe and indirect cost rates, such as from the NCDPW/NYSDEC standby contract.

With regard to the proposed labor rates for County staff, DEC will reimburse at the Grant Maximum labor rate (as listed in my December 21, 1993 transmittal) or at the NCDPW/NYSDEC standby contract rate, whichever is greater. This results in rates of \$40.09 (Chief Environmental Engineer), \$30.00 (Hydrogeologist III) and \$26.00 (HW Specialist II). Based on these rates, the estimated force account budget has been revised and enclosed.

The eligible project budget has also been revised to reflect the ineligibility of legal and administrative costs and 10% contingency costs. Contingency costs may be eligible if they are part of the municipality/consultant contract. However, according to State Finance Law, they cannot be a separate budget item in a State Contract.

The County/CDM contract has been forwarded to our Contract Development Section to verify consistency with our standby contract with CDM. After that review and receipt of the force account information, a Contract Amendment will be forwarded to you for signature.

Please call me at (518) 457-1641 if you have any questions.

Sincerely,

George W. Heitzman, P.E. Senior Environmental Engineer Division of Hazardous Waste Remediation \

GWH/a: forcacct.ftc

bcc: A. Shah

R. Cozzy/G. Heitzman

file: 130042/NCFTC/Grant Correspondence printed on recycled paper

Nassau County Fire Training Center Estimate of Eligible Remedial Design Costs

Title	Hours	Rate	Total
Chief Environmental Engineer Hydrogeologist III Haz. Waste Specialist II	390 185 45	\$40.09 \$30.00 \$26.00	\$ 15,635.10 \$ 5,550.00 \$ 1,170.00
Subtotal Fringe (57.84) Indirect (60.18)			\$ 22,355.10 \$ 12,930.19 \$ 21,234.69
Total Force Account			\$ 56,519.98
Remedial Design and Pilot Studies (CDM (subject to cost eligibility review)	Ţ		\$ 1,705,862.00
Total Estimated Eligible Cost			\$ 1,762,382.00
Estimated Grant Amount			\$ 1,321,786.50



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

```
December 21, 1993
      Mr. George W. Heitzman, P.E.
     New York State Department of
     Environmental Conservation
                                                                        8
     Eastern Remedial Projects Section
    50 Wolf Road
    Albany, New York 12233-4011
   RE:
        Nassau County Fireman's Training Center
       State EQBA Grant Application
       Design Phase Work
Dear Mr. Heitzman:
Please find enclosed two (2) copies of the state Environmental annihilation for the design phase work
 Tease find enclosed two (2) copies of the State Environmental the Fireman's maining Center with its design phase work
  the Fireman's Training Center site in Old Bethpage, New
     lication package consists of the following information:
         au County Board of Supervisors' Resolution
           tant Engineering Services Contract
            ive Action Work Plan
            lase Work Plan
               enclosed application and, if acceptable,
              tate EQBA Grant Agreement at your earliest
                            FOILABLE Y-N
                                           B.E.R.A.
                            SITE NAME
                            SITE CODE
SUB SECTIONS
                                                    FILE SECTION !
                           PRO ELEMENT
                           OPERABLE UNIT NO. DESC.
                           DRAFT OR FINAL
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Mr. George W. Heitzman, P.E.

New York State Department of
Environmental Conservation
December 21, 1993

Page Two
RE: Nassau County Fireman's Training Center
(Site #130041)

State EQBA Grant Application
Design Phase Work

If there are any questions concerning the grant application, please contact Mr. Peter J. Witkowski, Director of Hazardous Waste Services, at (516) 571-9600.

Very truly yours,

William Mulot

Acting Commissioner of Public Works

JMW:PJW:jm

Walter Hennenberger, Grants Administration

(with enclosures)

Gail Suchman, Esq., New York State Department of Law, (without enclosures)

TABLE OF CONTENTS

SECTION	CONTENTS
1	Application Form
2	Nassau County Board of Supervisors' Resolution
3	Consultant Procurement Package
4	Consultant Engineering Services Contract
5	Design Phase Work Cost Estimate
б	Affirmative Action Work Plan
7	Design Phase Work Plan

SECTION 1 - APPLICATION FORM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DATE RECEIVED		
PROJECT NO.		and a superior of the superior
on Editod	A	John M. Waltz, P.E., Acting Commissioner, Department of Public Works
- FOR STATE USE ONLY		William Moth
n application ' Date	h copy) to sig	Signature of individual authorized by resolution (attac
EP 92 21	-	fram (all fram)
, and exhibits is true, correct and er that any and all statements, data or the purpose of receiving State	statements re ief, and furth l ebam meed	CERTIFICATION: The undersigned does hereby cert the attached certified copies of resolution(s), othe complete to the best of his or her knowledge and beland supporting documents which have heretofore assistance for the project described herein are attach
69	309 - 149 (919	One West Street, Mineola, New York 11501 - (
obert J. McDonald, sputy County Executive. 9) PHONE NO. (Include area code)	Resignee, Ro Shief De Bood GiS bus	Thomas S. Gulotta, County Executive, or his or ADDRESS (Post Office Box No. or Street, City, State
ICATION (Please Print)	O SICN YBBE	NAME AND TITLE OF INDIVIDUAL AUTHORIZED T
contracts, or information on how will be awarded)		ESTIMATED PROJECT COST: \$1,974,345.80 contracts for Profess
date) and will be completed no later	ber 1,1993(c	SCHEDULE: Work has or will commence on Novem than November 1, 1994 (date) (Attach Project Schedu
	ermits, etc.)	(Reference and attach copy of order, p
•		OBLIGATION: Order On Consent, dated Febru
togndysog pro ur rosuco	9,,,,,,,,,,	Town of Oyster Bay. (Attach Project Marrative, Workplan, etc.)
		public health and environment at the Fireman
ement remedial facilities	Jqmi bas ag	DESCRIPTION (Purpose, scope, location): to abat
ıter	raining Cer	PROJECT NAME: Nassau County Fireman's
(тв.	13014 Progr	TYPE OF PROJECT XX Municipal Hazardous Waste Site Remediation Municipal Landfill Closure (Loan Program)
		COUNTY: Nassau
	usssal lo	NAME OF APPLICANT (Municipality): County of
TITLE 3 AND TITLE 5 APPLICATION FOR STATE ASSISTANCE		

SECTION 2 - NASSAU COUNTY BOARD OF SUPERVISORS' RESOLUTION

RESOLUTION NO. 1124 - 1993

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE, OR HIS

DESIGNEE, TO MAKE APPLICATION TO THE NEW YORK STATE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION TO ENTER INTO A NEW

YORK STATE ASSISTANCE CONTRACT PURSUANT TO ARTICLE 52 OF THE

ENVIRONMENTAL CONSERVATION LAW IN CONNECTION WITH THE

DEVELOPMENT AND IMPLEMENTATION OF A REMEDIAL PROGRAM AT THE

FIREMAN'S TRAINING CENTER, AND TO AUTHORIZE THE COMMISSIONER

OF PUBLIC WORKS, OR HIS DESIGNEE, TO UNDERTAKE SUCH ACTIONS

AND TO EXECUTE SUCH DOCUMENTS AS MAY BE NECESSARY RELATIVE TO

SUCH STATE ASSISTANCE PROGRAM IN ORDER TO INSURE TIMELY

IMPLEMENTATION ON THE PART OF NASSAU COUNTY OF SUCH REMEDIAL

PROGRAM AND EXPEDITIOUS REIMBURSEMENT OF ELIGIBLE COSTS BY

NEW YORK STATE OF EXPENSES INCURRED BY NASSAU COUNTY IN THE

MATTER.

Passed by Board of Supervisors on NOV 29 1993 votes for 108; votes against, none. Became a Resolution on NOV 29 1993 with the approval of the Deputy County Executive Acting for the County Executive.

whereas, the County of Nassau has entered into an Order on Consent with the State of New York, Department of Law and Environmental Conservation, with respect to an inactive . hazardous waste disposal site known as the "Nassau County"

Gj

Fireman's Training Center", in Old Bethpage, Town of Oyster Bay, Nassau County (herein the "Site");

WHEREAS, the aforesaid Order on Consent provides that the County shall develop and implement a remedial investigation/feasibility study, and remedial program (herein called the "Project"), designed to abate and eliminate the threat to the public health or environment at the Site and its off-site environs;

WHEREAS, Article 52 of the Environmental Conservation

Law, the Environmental Quality Bond Act of 1986, authorizes

financial assistance to municipalities for remediation of

inactive hazardous waste disposal sites by means of a written

agreement;

WHEREAS, the County deems it to be in the public interest and benefit under this law to enter into a contract therewith;

WHEREAS, State Assistance shall be provided to reimburse the County on a periodic basis for eligible Project costs as documented by a State of New York Standard Voucher, pursuant to the aforesaid contract;

WHEREAS, the County shall submit such reports, documents, data, contractual documents, endorsements and other information with respect to the Project as may from time to time be necessary; now therefore, be it

RESOLVED, that the County Executive, or his designee, is authorized to act in behalf of the County in all matters related to the aforesaid contract for financial assistance between the State and the County, including but not limited to the application for and the execution of the State

Assistance Contract, and for the execution of all documents and approval of all appropriate matters related to the Project; and, be it further

RESOLVED, that the Commissioner of Public Works, or his designee, is authorized to execute all appropriate documents and claim forms and act in behalf of the County in all other matters related to the State Assistance Contract, exclusive of application, acceptance, execution, or amendment of the aforesaid State Assistance Contract.

2 9 1993

Deputy County Executive

Di.

STATE OF NEW YORK
COUNTY OF NASSAU

NºP58884

I, JOHN A. DeGRACE, Clerk of the Board, Nassau County Board of Supervisors, do hereby certify that the
foregoing is a true and correct copy of the original HADULTUK 1/24-1993 duly
passed by the Board of Supervisors of Nassau County, New York, on Mountain 39/95
passed by the Board of Supervisors of Nassau County, New York, on Moderated 29/93 and approved by the County Executive on Mumilian 29/1993 and on file in my
office and recorded in the record of the proceedings of the Board of Supervisors of the County of Nassau and
of the county of the proceedings of the bourd of superobors of the County of thussuu und
s the whole of said original.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said Board of Supervisors,

his 3920 day of

in the year one thousand nine hypotred and

JOHN . DeGRACE

Clerk of the Board

Nassau County Board of Supervisors

FORM 86 100B 4/91

SECTION 3 - CONSULTANT PROCUREMENT PACKAGE

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NC Copy

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS

REQUEST FOR PROPOSALS



JOHN M. WALTZ, P.E. ACTING COMMISSIONER

APRIL 1993

NASSAU COUNTY

DEPARTMENT OF PUBLIC WORKS

REQUEST FOR PROPOSALS

FOR

FIREMAN'S TRAINING CENTER REMEDIATION DESIGN

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2.0	SCOPE OF SERVICES REQUIRED	7
3.0	PROPOSAL REQUIREMENTS	12
4.0	PROPOSAL EVALUATION AND SELECTION PROCESS	16

Section 1.0: INTRODUCTION/BACKGROUND AND GENERAL INFORMATION

The Nassau County Fireman's Training Center is a 12-acre site used as an advanced fire-fighting training facility for Nassau County's volunteer fire fighters. The site is located on Winding Road near Round Swamp Road in Old Bethpage, and is bordered on the northwest by the Old Bethpage Landfill and on the south and east by the Bethpage State Park.

Between 1970 and 1980, various spent organic solvents were reportedly accepted at the site for fire training exercises. Until 1984, unburned fuel and solvents were washed out of the burn areas by high pressure hoses and collected in dry well fields that allowed contaminated wash water to flow through subsurface soils and into the groundwater. Additional subsurface contamination may have occurred from leaking gasoline and fuel oil tanks and their associated piping.

Beginning in November 1989, the Nassau County Department of Public Works (N.C.D.P.W.) conducted a Remedial Investigation of contamination at the site, and subsequently prepared a Feasibility Study to determine the best remedial action for the site. These studies were conducted with the oversight of the New York State Department of Environmental Conservation (NYSDEC), pursuant to a February 1989 Order on Consent and were completed in January 1993.

The results of the Remedial Investigation have shown that contaminated soil and groundwater associated with the site can be segregated into four distinct areas for remediation:

Shallow Soils

. Shallow soil contamination on-site is the result of open burn exercises in the three training areas.

Approximately 7500 cubic yards of soil has been contaminated by oil and grease and the chemicals

Benzene, Toluene and Xylene (BTX). The three training areas were paved over in 1985, and it is estimated that the current asphalt and concrete paving is 90% effective in reducing infiltration of water through the contaminated shallow soils.

Deep Soils

. Deep soil contamination on-site is found beneath each of the dry well fields and in areas where floating product is present at the water table. The estimated quantities of contaminated soil in the dry well fields and the product bodies are 12,800 and 17,000 cubic yards, respectively.

On-Site Groundwater

- . Groundwater beneath the Fireman's Training Center is contaminated by four general categories of chemicals:
 - BTX contamination associated with fuel oil and gasoline releases,
 - Chlorinated solvent and acetone contamination associated with historical solvent usage,
 - Semivolatile contamination associated with oil and gasoline releases, and
 - Inorganic landfill leachate contamination from the adjacent Old Bethpage Landfill.

On-site contaminated groundwater is present at between 40 and 100 feet below land surface and flows in a south-southeast direction, toward the Bethpage State Park.

Off-Site Groundwater

. The off-site groundwater plume consists of dissolved contamination and has migrated beyond the FTC site boundary to a location approximately 4,000 feet downgradient to the south-southeast. Off-site contamination occurs primarily from 200 -300 feet below land surface in the Magothy aquifer and consists of predominantly chlorinated solvent organics.

Based on the results of the Remedial Investigation and a thorough analysis of the criteria for effective remediation, DEC is directing that Nassau County proceed with the following remedial measures:

Shallow Soil

Capping with deed restrictions, to prevent human contact with the contaminants and minimize future releases of contaminants to the groundwater.

Deep Soil

Bioventing, to remediate both the volatile and semivolatile contamination in the deep soils.

On-Site Groundwater

Pumping and treating for source control and remediation of the contaminated groundwater through a combination of three recovery wells, capable of pumping up to 400 gpm. The groundwater will be treated and discharged to a recharge basin. The proposed groundwater treatment will effectively reduce all types of groundwater contaminants at the FTC, including volatile and semivolatile organic compounds and metals.

Off-Site Groundwater

Pumping and treating from up to twelve groundwater

recovery wells installed throughout the area of the contaminated plume at a combined rate of up to 1800 gpm. Proper placement of the recovery wells will ensure the remediation of the contaminated groundwater, and protect the downgradient public water supply wells. The extracted off-site groundwater will be treated by air stripping and recharged to groundwater in accordance with State requirements.

More detailed information concerning the nature and extent of on-site and off-site contamination and the selected remedy can be found in the Remedial Investigation Report,
Feasibility Study, Endangerment Assessment Report, and the Record of Decision, which are enclosed as part of this RFP.

Section 2.0: SCOPE OF SERVICES REQUIRED

It is the intent of the County to retain a firm(s) that can provide design services for the Fireman's Training Center Remediation project, a project which is mandated by an Order on Consent with the New York State Departments of Law and Environmental Conservation, and which will be funded by the New York State Environmental Quality Bond Act. The following specific services are required:

- (1) A bioventing system pilot study and subsequent full scale bioventing system design and preparation of biddable plans and specifications to address onsite petroleum and solvent contaminated soils. The design, plans and specifications shall include all necessary structures, piping, pumps, electrical systems, instrumentation and related work.
- (2) Design and preparation of biddable plans and specifications for the completion of on-site capping of shallow contaminated soil areas.
- (3) Design and preparation of biddable plans and specifications for three on-site groundwater extraction wells including all necessary structures, piping, pumps, electrical systems, instrumentation and related work.
- (4) Design and preparation of biddable plans and specifications for an on-site treatment system with discharge to an on-site basin. The design shall

consist of a building, and the following unit operations: metals precipitation, air stripping with emission control, sand filtration and activated carbon adsorption. The design shall also include all required piping, pumps, electrical systems, instrumentation, HVAC and related work. The approximate proposed design flow for the onsite treatment plant shall be up, 400 gpm.

- (5) Design and preparation of biddable plans and specifications for up to twelve (12) off-site groundwater extraction wells including all necessary structures, piping, pumps, electrical systems, instrumentation and related work.
- specifications for a treatment plant to remediate the off-site groundwater. The treatment plant will be constructed on the Fireman's Training Center property and shall consist of a building (can be within same building as for on-site treatment processes) and an air stripping system including all necessary piping, pumps, electrical systems, instrumentation, HVAC and related work. The consultant shall also determine the need for any air emission controls, and if necessary, design and prepare biddable plans and specifications for an air emission control system. The approximate

proposed design flow for the off-site treatment system shall be up to 1800 gpm.

- (7) An Evaluation Study of the feasibility of the discharge of the off-site treated plume water to a recharge basin or to recharge wells. Following the Evaluation Study, the consultant shall design and prepare biddable plans and specifications for an off-site recharge basin or up to seven (7) offsite groundwater recharge wells for the disposal of the treated off-site extracted groundwater. The design will include all necessary structures, piping, pumps, electrical systems, instrumentation and related work.
- (8) Develop a Remediation Monitoring Plan to address both on-site and off-site contamination, as well as all necessary treatment process monitoring.
- (9) Complete a Design Sampling round for twenty (20) existing monitoring wells, listed as follows:

Monitoring Well	<pre>Depth of Well (Ft.) *</pre>
FTC-W-7A	44
FTC-W-7B	99
FTC-W-20A	76
FTC-W-20B	113
FTC-W-20C	175

Monitoring Well	Depth of Well (Ft.)
FTC-W-20D	239
FTC-W-7C	170
FTC-W-7D	240
FTC/BP-1B	110
FTC/BP-1C	162
BP-3B	235
BP-3C	300
BP-4B	190
BP-4C	300
BP-5B	200
BP-5C	270
BP-9B	204
BP-9C	345
BP-10B	230
BP-10C	377

^{*} All monitoring wells are four (4) inches in diameter.

All monitoring wells listed above shall be analyzed for TCL Volatile Organics, and Landfill Leachate Parameters.

Monitoring wells FTC-W-7A, 7B, 7C and 7D and FTC-W-20A, 20B, 20C and 20D, shall also be analyzed for semi-volatile organic compounds.

Firms are required to address all above nine (9) specific services in their proposal. If a firm(s) fails to have a complete proposal addressing the nine (9) specific services, the County will consider the firm's proposal incomplete and rejected. However, please note that the State and the County encourages alternative treatment schemes; again please be aware that a firm(s) can only submit an alternative treatment after it has prepared a proposal for the nine specific services.

It is important to note that all Bid documents when designed, shall be in full compliance with the WICKS Law, as required in New York State.

The firm selected to perform the design services requested shall be required to submit to the County, as mandated by the Order on Consent with the State for this project, a preliminary design within 120 days after the execution of the design contract, a 50% complete design, and a minimum of fifty (50) sets of final plans and specifications for bid within 180 days of the approval by the State of the Preliminary Design.

Please note that the firm selected by the County to perform the services requested in the RFP also may be requested to provide construction management services for the construction phase of the FTC Remediation Project.

Section 3.0: PROPOSAL REQUIREMENTS

All proposals must consist of two Parts: 1) Technical Proposal, and 2) Cost Proposal. The Technical proposal should include the following:

- Summary
- Technical Scope
- Management and Organizational Structure
- Schedule

The proposal should include a brief description of the Proposer's corporate/business structure and history. In addition, an organizational chart should be presented which illustrates the chain of command and project management structure to be used to manage and complete the proposed project. The organizational chart should include the names, professional titles, and role of the key individuals to be involved in the proposed project.

Joint ventures, partnerships, use of subsidiary firms and other corporate participants should be identified and all functions and responsibilities of each participant must be listed.

Generally, the technical proposal must include information relating to:

- the experience and qualifications of the Proposer to carry out all required work
- the ability of the Proposer to provide the required project staffing

- the ability of the Proposer to implement all work tasks and carry out all responsibilities
- A Technical Plan and implementation schedule

An important element of the Fireman's Training Center Remediation Project is the use of a bioremediation technology to remediate the on-site contaminated soils. Therefore, it is strongly recommended that each proposer present a team knowledgeable and experienced in designing and testing of bioremediation systems.

The Proposer must identify any subcontractors/
subconsultants to be utilized to provide the services
required. The subcontractors/subconsultants must be
identified and the information relating to history,
experience, and qualifications required for the Proposer will
also be required for the subcontractor/subconsultant. The
Proposer shall not award work to any subcontractor/
subconsultant without the prior written approval of the
County.

The successful Proposer will be responsible for any acts and omissions of its subcontractors/subconsultants, and of persons either directly or indirectly employed by them. Subcontractors/subconsultants will be subject to all applicable obligations, requirements and limitations under the contract awarded to the successful Proposer. There will be no direct contractual relation between any subcontractor/

subconsultant and the County.

Each proposal must also include a separate sealed Cost Proposal which must identify and specify all elements of costs to the County relating to: planning, design and management.

A preproposal conference will be held at County offices one week following the transmittal to the consultants of the RFP. All firms requested to submit a RFP will be notified in writing by the County of the specific location and time of the preproposal meeting. The intent of the preproposal meeting is to present the services and requirements requested in the RFP and to answer questions by the prospective proposers.

Proposals must be received by the County no later than 4:45 PM, Wednesday, May 26, 1993, at the following address: (This deadline will not be extended).

John M. Waltz, P.E. Acting Commissioner Nassau County Department of Public Works One West Street Mineola, New York 11501

The outside of the box, package, or envelope containing the Proposal should bear the name and addresses of the Proposer, and must be marked "PROPOSAL FOR FIREMAN'S TRAINING CENTER REMEDIAL DESIGN". The contents of the box, package,

or envelope must contain ten (10) copies of the technical proposal, and one separately sealed envelope containing the cost proposal, clearly marked "COST PROPOSAL". The proposals submitted will constitute formal offers to the County that are binding on the Proposer and effective for a period of 180 calendar days from the deadline date established for submittal of Proposals. The County reserves the right to reject any or all proposals, and to change the scheduled date for submission of proposals.

Costs and expenses incurred by a Proposer submitting a proposal, including but not limited to cost and expense of research, preparation, presentations, any additional information requested by the County, contract negotiations, and legal expenses shall be borne by the Proposer. The County will not be responsible for reimbursing any such costs. In addition, such costs are not to be included or reflected in the Proposer's price offer. The County will have no obligation to pay any Proposer until and only to the extent provided by a fully executed contract between the County and the Proposer.

Additional data required by the Proposer to submit an appropriate response to the RFP, must be requested in writing to the Commissioner of the Nassau County Department of Public Works.

Section 4.0: PROPOSAL EVALUATION AND SELECTION PROCESS

The County will evaluate proposals using a two step approach. The first step will involve rating proposals on the basis of their technical merits. This technical evaluation will feature consideration of specific technical criteria including: technical viability; project schedule; and Proposer's experience. The second step involves an evaluation of the cost proposals (submitted in separate sealed envelopes) associated with each of the highest rated technical proposals.

Specifically, each proposal will be evaluated with respect to technical and experience criteria. The following are several key technical and experience criteria that will be considered by the County during the proposed review process:

TECHNICAL:

- 1. Understanding of the problem or need
- 2. Soundness of the proposed approach
- 3. Recognition of potential problems and difficulties
- 4. Key personnel to be assigned to the project
- Reasonableness of the estimated time to complete each task

EXPERIENCE:

- Experience of the personnel specifically committed to the project
 - a. years
 - b. similar projects
 - c. education
- Number of qualified personnel offered
- 3. Experience of the firm
 - a. years in the field
 - b. similar projects in scope and size
- 4. Similar projects which have been completed by the firm
 - a. did the firm perform as expected?
 - b. on time?
 - c. within budget? '
 - d. with demonstrated professionalism?

Location and availability of personnel (e.g., will personnel have to travel short distances or long distances?) will also be seriously considered because of the Consent Order time constraints placed on this project.

The proposal evaluation and selection process will be conducted by a team comprised of personnel from the County. The team will only consider a proposal to be complete if it includes the information requested. Incomplete or non-responsible proposals will be rejected and Proposers will not be given the opportunity to resubmit their proposal.

After the top rated proposals have been identified as a result of the technical evaluation of this RFP, they will be compared according to cost. Costs will be compared on the basis of proposed design and study costs.

Specifically each cost proposal will be evaluated with respect to:

- 1. Are all costs included?
- 2. Are the labor costs per hour in line with other firms?
- 3. Is sufficient detail presented to allow evaluation and comparison with other cost proposals?
- The labor costs for individual elements included in the Program of Services.
- 5. The reasonableness of the indirect costs and the method of allocating and arriving at such indirect costs.
- 6. The reasonableness of direct non-labor costs.
- 7. The reasonableness of the fixed fee profit. In cost plus fixed fee contracts, the agreed upon profit cannot be increased above that amount specified in the contract.

It must be strongly noted that this contract will be 75% funded by New York State Environmental Quality Bond Act Funds. As such, NYSDEC employees will be deeply involved in the auditing of your vouchers for payment, which must be extremely detailed. Certain expenses may not be

reimbursable by the State. If expenses are not reimbursable under NYSDEC EQBA procedures, the County will also not reimburse for them. We recommend that you fully familiarize yourselves with these procedures before submitting a proposal. A copy of the New York State Department of Environmental Conservation Municipal Assistance Program, Hazardous Waste Site Remediation, Record-Keeping and Payment Guide, Title 3 Programs - 1986 Environmental Quality Bond Act, is enclosed as part of this RFP. In addition, a copy of a typical County design consultant contract has been enclosed as part of this RFP. It is strongly advised that each proposer review and clearly understand the terms and the limits of both the State Title 3 grant funds and the County design services contract.

COUNTY OF NASSAU

Inter-Departmental Memo

TO:

John M. Waltz

Acting Commissioner of Public Works

FROM:

Division of Sanitation & Water Supply

DATE:

June 23, 1993

SUBJECT: Fireman's Training Center Request for Proposals

Technical Review

The Technical Review Committee for the Fireman's Training Center (FTC) Request for Proposals (RFP) met on Friday, June 18th, to discuss the RFP evaluations.

The Committee's evaluations focused on two elements, the numerical scores from the RFP Evaluation Forms and various technical review comments. The following is a summary listing of the technical review scores for the six RFP's evaluated:

Camp Dresser & McKee	85.5
Blasland & Bouck	78.8
ERM - Northeast	77.8
Dvirka & Bartilucci '	76.7
Roy F. Weston	70.5
Dunn Corporation	70.3

There was a clear consensus of all reviewers that Camp Dresser & McKee (CDM) had provided the best overall technical proposal. Additional highlights beyond the traditional engineering services was CDM's proposed subconsultant, Envirogen, Inc., a national leader in bioremediation, and CDM's in-house groundwater modeling skills which would provide the County with an experienced team capable of completing the complex FTC remedial design within the strict Consent Order mandated schedule.

Because CDM clearly provided the best technical proposal well ahead of the second group of proposers, it was decided by the Technical Review Committee to only open CDM's cost proposal for evaluation. The cost proposed by CDM to complete the FTC remedial design is \$1,442,802.

As part of the FTC Remedial Investigation/Feasibility Study, the construction cost for the remedial facilities was estimated to be \$14,044,000. Therefore, CDM's cost proposal



John M. Waltz Acting Commissioner of Public Works June 23, 1993 Page Two

RE: Fireman's Training Center Request for Proposals
Technical Review

is reasonable considering that their design engineering services will also include pilot bioremediation studies, groundwater modeling, an air emission study, and a Monitoring Plan. In addition, we have had informal discussions with the New York State Department of Environmental Conservation, and they find both CDM and the cost estimate to be acceptable for Environmental Quality Bond Act, Title 3, funding.

Therefore, the Technical Review Committee recommends that the County contact CDM to begin final contract negotiations for the FTC Remedial Design services.

If you concur with the above, please sign the approval space below and return to this office for appropriate action.

James a Sie

James A. Oliva Director of Environmental Operations Acting Head, Division of Sanitation & Water Supply

JAO:PJW:jm

RECOMMENDED AND APPROVED:

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JOHN M. WALTZ

ACTING COMMISSIONER OF PUBLIC WORKS

DATE

FIREMAN'S TRAINING CENTER

PROPOSAL REVIEW

Final Scores:

DUNN

ERM

WESTON

D&B

B&B

CDM

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SECTION 4 - CONSULTANT ENGINEERING SERVICES CONTRACT

SECTION	4 -	CONSULTANT	ENGINEERING	SERVICES	CONTRACT	

THIS AGREEMENT made by and between the COUNTY OF NASSAU a municipal corporation having its principal offices at One West Street, Mineola, New York 11501, (hereinafter referred to as the "County"), and Camp Dresser & McKee, having its principal offices at 100 Crossways Park West, Woodbury, New York 11797, (hereinafter referred to as the "Consultant").

WITNESSETH:

WHEREAS, the Consultant is a professional partnership, adequately staffed with personnel, consisting of engineers, architects and scientists, highly skilled and experienced in the performance of structural, environmental and sanitary engineering, hydrogeological and architectural services; and

WHEREAS, the County Commissioner of Public Works

(hereinafter referred to as the "Commissioner") has

recommended that the Consultant be retained for the purpose

of rendering structural, environmental, sanitary engineering

and architectural services for the remediation of soil and

groundwater contamination at the Fireman's Training Center in

Old Bethpage, New York, upon the terms and conditions

hereinafter provided; and

WHEREAS, the Consultant is familiar with the Federal and State requirements for the investigation and remediation of soil and groundwater contamination, and is familiar with the hydrogeology of Long Island; and

WHEREAS, the services of the Consultant constitute personal services within the intent and purview of Section 2206 of the County Government Law of Nassau County;

NOW, THEREFORE, the parties hereto mutually agree as follows:

BASIC SERVICES OF CONSULTANT:

I. SCOPE OF SERVICES:

Subject to the direction and control of the Commissioner, the Consultant agrees to perform all the usual and necessary engineering services in connection with the soil and groundwater remediation required for the preparation of biddable design plans and specifications in accordance with the terms of the Consent Order dated February 9, 1989 (copy attached). The detailed outline of services and associated budget estimates per job task are attached as Attachment No. 1.

II. PERIOD OF SERVICE:

Services under this Agreement shall commence upon written authorization of the Commissioner and shall be performed in accordance with the schedule set forth in the Consent Order dated February 9, 1989. Services shall be considered complete upon furnishing the final plans and specifications suitable for acceptance by the Commissioner and appropriate regulatory agencies.

III. FEES FOR SERVICES:

- A. In consideration of the services to be rendered as described in this Agreement, the County and the Consultant mutually agree to the ostablishment of a contract cost ceiling in the amount of \$1,705,862.
- B. The method of payment shall be the total aggregate amount of items 1, 2, 3, 4 and 5 described below, subject to

the cost ceiling limitations set forth above. Monthly partial payments to the Consultant shall be calculated and invoiced on the basis of the sum of the following items:

- 1. <u>Direct Labor Cost</u> actual wages or salaries paid to the professional and technical personnel of the Consultant's staff (exclusive of payroll taxes, insurance and all other employee benefits).
- 2. <u>Overhead</u> (indirect costs): equal to the Direct Labor Cost times 1.749.
- Other direct costs as described in paragraph D below at actual cost.
- 4. A profit equal to the sum of the total Direct Labor Cost plus Overhead, all times a factor of 5%.
- 5. Invoiced amounts of sub-consultants' services, plus an administrative fee of 5%. The 5% administration fee is only applicable for sub-consultants' cost over \$10,000.00.
- C. Sub-consultants engaged by the Consultant shall be compensated on a similar basis as provided herein for technical employees and principals of the Consultant. The following sub-consultants are approved as part of this Agreement:
 - Envirogen/Vapex
 - Energy & Environmental Engineering Inc.
 - Mellick-Tully and Associates
 - Nanik Massand, P.C.
 - Savin Engineering, P.C.

Prior to engaging any additional outside sub-consultants not previously listed, the Consultant shall first obtain the written permission from the Commissioner.

The estimated sub-consultant cost, see Attachment 1, may not be exceeded without written approval of the Commissioner.

- D. The Consultant and approved sub-consultants shall be further reimbursed for the following other Direct Costs incurred in the interest of the provisions of this Agreement:
- 1. Transportation and living expenses for travel beyond a 50-mile radius from the job site, with prior written approval of the Commissioner, and at rates prescribed for County employees in like circumstances. Travel and living expenses related to travel between the offices of the Consultant and the Fireman's Training Center site, shall not be paid to the Consultant.
- 2. The cost of other services as may be required hereunder but which are not normally included as part of the overhead of the Consultant. Such other services as required to complete this Agreement may include, but are not limited to, the following:

Software costs, printing costs, reproduction costs, telephone (except to area codes 212, 718, 516, 201, 203 or 914), telegraph costs, shipping, laboratory and testing services, and special equipment.

- E. Premium pay for overtime, over and above the straight hourly rate, shall not be subject to any multipliers. In computing the cost to the County for overtime work performed, the overtime shall be paid at the straight hourly rate times the indirect cost multiplier, plus the actual premium overtime cost incurred.
- F. Payment of the Consultant's fee for services rendered shall be made monthly upon presentation of claim forms supplied by the County Comptroller and approved for payment by the Commissioner, or his authorized representative. Each claim form shall be accompanied by a certified statement signed by the

Consultant, setting forth the name and title of each person who was engaged in each separate project during each month, his hourly rate of pay, the number of hours worked, the amount of compensation earned, and the statement that the billing is for technical services only.

G. The Consultant shall maintain full and complete books and records of accounts in accordance with accepted accounting practices, and such other records as may be prescribed by the Comptroller of the County of Nassau. Such books and records shall be retained for a period of six (6) years from the final payment, and shall at all times during normal business hours and upon reasonable notice be available for audit and inspection by the County Comptroller, his duly designated representative, or any other public agency having jurisdiction of work performed hereunder.

IV. MISCELLANEOUS PROVISIONS:

- A. Maximum Wage Rate Schedule Attached to this Agreement as Attachment No. 2 is a schedule entitled "Maximum Wage Rate Schedule" listing the various job titles of the personnel to be used on this project, and the maximum hourly wage rate currently in effect for each job title. Said schedule shall be deemed to be a part of this Agreement. Where appropriate, increases to the "Maximum Wage Rate Schedule" may be made at the option of the Commissioner on a yearly basis. All requests for increases shall be made between November 1 and December 15, to become effective January 1 of the following year. In no event shall an employee's wage rate exceed the maximum rate for their classification.
- B. <u>Claims for Payment</u> With respect to any claim for payment submitted for <u>Girect Sulary</u> costs, the certified statement to be attached to such claim form, as herein provided, shall further recite that the hourly wage rate listed for each

of the personnel named in said certified statement, was the prevailing hourly wage rate for such employee at the time of the commencement of the project. If any employee so listed had received an increase in his wage rate, the Consultant shall certify that such increase did not exceed the amount authorized by the Commissioner for the employee's job classification.

- C. <u>Insurance</u> <u>Consultant's Responsibilities</u> This

 Agreement shall be void and of no effect unless the Consultant shall provide Certificates of Insurance, and keep in full force and effect during the life of the Agreement the following:
 - 1. Commercial/General Liability Insurance, WHICH NAMES THE COUNTY AS AN ADDITIONAL INSURED, in an amount not less than \$2,000,000 aggregate.
 - 2. Professional Liability Insurance in an amount not less than \$3,000,000 aggregate.
 - 3. Workers' Compensation for the benefit of such employees as are necessary to be so insured in order to comply with provisions of the New York State Workers' compensation Law.

All proofs of insurance coverage must contain not less than twenty (20) days written "Notice of Cancellation" clauses, and shall be delivered upon signing of this Agreement.

D. The Consultant further agrees to comply with any and all applicable provisions of the laws of the State of New York, the County of Nassau, and all local government agencies. The Consultant agrees to defend, indemnify, protect, and save harmless the County, its employees, agents and officers from and against any and all losses, damages, detriment, suits, claims cost and expense for injuries (including death) to persons or damage to property arising out or or in connection with the performance of work hereunder which is directly or indirectly caused by or resulting from the errors, omissions, or negligence of the Consultant, its employees, agents, or any sub-consultant

retained by the consultant herein. The County reserves the right to postpone, delay, suspend or terminate the services of the Consultant at any time and for any reason deemed to be in the interest of the County. In such event, the Consultant shall be paid such sum as shall be determined to be due and owing as of the date of such termination, plus all reasonable costs for demobilization. postponement, delay, suspension or termination shall not give rise to any cause of action against the County for damages or for extra remuneration. If a project is reactivated, the Consultant's fee may be re-negotiated. F. It is agreed that the Consultant at all times shall be deemed to be an independent contractor, and shall not in any manner whatsoever, by any action or deeds, commit the County to any obligation irrespective of the nature thereof, and the Consultant shall not at any time, or for any purpose, be deemed an employee of the County. G. It is further understood and agreed that no agent or employee of the Consultant shall, at any time, or under any circumstances, be deemed to be an agent or employee of the County. Н. This Agreement, or any part thereof, shall not be assigned, transferred, or sublet without the written consent and approval of the County Executive. I. The Consultant warrants that it is not in arrears to the County upon debt or contract, and is not a defaulter as surety, contractor, or otherwise. This Agreement is made subject to the provisions of Article 18 of the General Municipal Law of the State of New York, as amended, and Section 22-4-2 of the Administrative Code of Nassau County, and the provisions of the Anti-discrimination Order of Nassau County. K. Indemnity - Notwithstanding any other provision -7contained herein to the contrary, it is specifically agreed and understood that the Consultant shall be entitled to the protection offered by the provisions of Chapter 536 of the New York laws of 1987.

- L. Innovative Technology The County recognizes that the selected remedy for the Fireman's Training Center bioventing will involve the use of innovative technologies or processes that do not have a proven track record of performance. However, these technologies or processes provide a remediation alternative with limited by-products which will reduce the overall negative impact on the environment, and may reduce overall program costs. As a result, notwithstanding the provisions of Article IV, D and L, of this Agreement, the Consultant shall be liable only for its gross negligence in the performance of its services with regard to the ability of the technologies or processes to achieve water quality standards. For all other services, the provisions of Article IV, D and L will apply.
- M. Proprietary Information Notwithstanding any other provision of this Agreement between Consultant and County or any provisions contained in the scope of work, all of Consultant's pre-existing or proprietary computer programs, software, materials or information developed by Consultant outside of this Agreement shall remain the exclusive property of Consultant.
- N. Manifest Signing County shall be responsible for the long-term storage and disposal of waste materials generated as a result of sampling, pilot testing, and/or monitor well construction and development. Consultant or Consultant subcontractor(s) shall place such waste materials in containers for temporary storage on-site consistent with industry practice, and in full compliance with all Federal, State and local laws and regulations. County shall sign any and all required manifests relating to the transportation, storage, treatment,

generation and disposal of all wastes associated with this Agreement.

- O. Status of Consultant Nothing contained in this
 Agreement shall be construed or interpreted as requiring
 Consultant to assume the status of a generator, storer, treater,
 transporter or disposal facility as those terms appear within
 the Resource Conservation and Recovery Act, 42USCA, Section
 6901, et seq. (RCRA), or within any state statute of similar
 effect governing the generation, storage, treatment,
 transportation or disposal of water.
- P. Cost Control/Opinions of Construction Cost Opinions of probable construction cost, financial evaluations, feasibility studies, economic analyses of alternative solutions and utilitarian considerations of operations and maintenance costs prepared by Consultant hereunder will be made on the basis of Consultant's experience and qualifications and represent Consultant's best judgment under this Agreement. However, since Consultant has no control over the cost of labor, materials, equipment or services furnished by others, or over any contractor(s) methods of determining prices, or over competitive bidding or market conditions, Consultant cannot and does not guarantee that proposals, bids or actual construction costs will vary from Consultant's opinions.
- Q. Standard of Care The standard of care for all professional engineering and related services performed or furnished by Consultant under this Agreement will be the skill and care ordinarily used by members of Consultant's profession practicing under similar conditions at the same time and in the same locality. Consultant makes no warranties, express or implied, under this Agreement or otherwise, in connection with Consultant's services.
- R. Invalid Provisions If any provision of this Agreement is held to be invalid, the parties shall, to the maximum extent

possible, re-negotiate the provision to best represent the original intent of the parties. All other terms and conditions shall remain valid and fully enforceable.

IN WITNESS WHEREOF, the Consultant has executed this Agreement the 844 day of SEP7, 1993, and the County has executed this Agreement the 19 day of October, 1993.

NASSAU

Chief Deputy Jounty Executive

CAMP DRESSER & MCKEE

William S. Howard

Partner

APPROVED) AS

chief Deputy County Attorney

Acting Commissioner of Public Works

MS.4

STATE OF NEW YORK))ss.: COUNTY OF NASSAU day of On this ,1993, before me personally appeared THOMAS S. GULOTTA, County Executive of the County of Nassau, the municipal corporation described herein, and who executed the foregoing instrument, to me known and known to me to be such County Executive and he being by me duly sworn, did depose and say: That he is the County Executive of Nassau County; and that he executed the same as such County Executive for the purposes therein mentioned. NOTARY PUBLIC STATE OF NEW YORK))ss.: COUNTY OF NASSAU) on this 'a day of October , 1993, me personally appeared Robert J. McDonal Deputy County , 1993, before Executive of the County of Nassau, the municipal corporation described herein and who executed the foregoing instrument, to me known and known to me to be such Deputy County Executive, and he by me being duly sworn, did depose and say: That he is the Deputy County Executive of the County of Nassau and that pursuant to Section 205 of the County Government Law of Nassau County executed the same as such Deputy County Executive for the purposes therein mentioned. NOTARY PUBLIC. State of New York NOTARY PUBLIC No. 30-4661699

Qualified in Nassau County

Commission Expires June 30, 19 STATE OF NEW YORK))ss.: COUNTY OF NASSAU) day of September, 1993, before , 1993, before On this me personally came William being by me duly sworn, did depose and say: That he resides that he a partner in CAMP DRESSER & MCKEE, the partnership described in and which executed the above Agreement; and that he signed his name thereto by order of Articles of Partnership. STEPHEN P. CITO Notary Public State of New Jersey LD. No. 2073573 Qualified in Hunterdon County My Comm. Expires March 29, 1995 NOTARY PUBLIC STATE OF NEW YORK)) ss.: COUNTY OF NASSAU)

before me personally came to known and known to me to be the person described in and who

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executed the same.

1993

NOTARY PUBLIC

to me

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ATTACHMENT NO. 2

MAXIMUM WAGE RATE SCHEDULE

CAMP DRESSER & MCKEE

1993

TITLE	MAXIMUM (\$/HR)
Project Manager	52.00
Project Engineer	44.00
Project Scientist	44.00
Engineer	31.00
Scientist	31.00
Designer	27.00
Draftsperson	21.00
Technician	21.00
Technical Typist	19.00

SECTION 5 - DESIGN PHASE WORK COST ESTIMATE

ESTIMATE OF DESIGN PHASE COSTS

1.	Legal & Administrative (2% CDM Costs)	\$	34,117.24
2.	Nassau County Force Account (See estimate attached)		63,780.44
3.	Remedial Facilities Design and Studies (See CDM estimate attached)	1,	705,862.00
4.	Contingencies (10% CDM costs)		170,586.20
	Total Estimated Eligible Cost:	\$1,	974,345.88
	Grant Amount @ 75%:	\$1,	480,759.30

Fireman's Training Center Remediation Project Design Phase Work N.Y.S. Superfund Grant Eligible Technical Services Estimate of Force Account Work

	Chief Envire Chemical B	Environmental nical Engineer	Hydrogeologist III	logist III	Hazardous Waste Specialist II	s Waste list II
Hourly Rate (1994)	\$47.09		\$30.62	ä	\$26.60	
Tasks	Work Hours	Cost	Work Hours	Cost	Work Hours	Cost
1. Bioventing	0	\$0.00	70	\$2,143.40	30	\$798.00
2. Capping	0	\$0.00	0	\$0.00	0	\$0.00
Onsite G.W. Extraction Well Design (Modeling)	30	\$1,412.70	70	\$2,143.40	0	\$0.00
4. Onsite G.W. Treatment	200	\$9,418.00	0	\$0.00	0	\$0.00
5. Offsite Extraction Well Design	30	\$1,412.70	30	\$918.60	0	\$0.00
6. Offsite G.W. Treatment	100	\$4,709.00	0	\$0.00	0	\$0.00
7. Offsite Recharge Feasibility Study	0	\$0.00	0	\$0.00	0	\$0.00
8. Remediation Monitoring Plan	0	\$0.00	0	\$0.00	0	\$0.00
9. Groundwater Sampling	0	\$0.00	15	\$459.30	15	\$399.00
10. Miscellaneous Tasks	0	\$0.00	0	\$0.00	0	\$0.00
11. Bioreactor Design	30	\$1,412.70	0	\$0.00	0	\$0.00
SUBTOTAL	390	\$18,365.10	185	\$5,664.70	45	\$1,197.00
Fringe (57.84)		\$10,622.37		\$3,276.46		\$692.34
Indirect Cost (60.18)		\$17,444.66		\$5,380.79		\$1,137.01
TOTAL		\$46,432.14		\$14,321.95		\$3,026.35

\$63,780.44

Force Account Total:

The attached narrative outlines the background of the Hazardous Waste Unit Personnel as having the necessary skills and experience to safely and effectively accomplish the work, and do so in a timely fashion. The nature of the work to be undertaken by these employees precludes such oversight responsibilities from being assigned to other than County employees. We therefore request your approval for Force Account Costs as outlined on the attached schedule entitled "Estimate of Force Account Costs".

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS

FIREMAN'S TRAINING CENTER NYS SUPERFUND GRANT FORCE ACCOUNT WORK

The Nassau County Department of Public Works, Division of Sanitation and Water Supply, Hazardous Waste Unit, is comprised of technical and scientific personnel who are health and safety trained, and who are enrolled in a medical surveillance program per all federal, state and local regulations. Civil, Sanitary and Chemical Engineering disciplines and hydrogeological expertise allow the Hazardous Waste Unit to conduct, in-house, all phases of soil/groundwater investigations from initial response to final design. Administrative staff are available to assist with report preparation and related tasks.

Personnel currently employed by the Hazardous Waste Unit first became involved with the Fireman's Training Center in 1985, when, during the performance of field studies for various site improvements, several areas of subsurface contamination were first identified. These same employees have continued work at the site subsequent to these initial discoveries and therefore are the most perpetually cognizant of historical and technical developments with regard to the site. Working closely with Camp Dresser & McKee, the consultant selected via appropriate procurement procedures, these employees provide data collection and interpretation, field inspection, monitoring, design services and such duties as are required to accomplish the tasks of the Design phase work.

The Nassau County Department of Public Works believes that the employees of the Hazardous Waste Unit can provide timely, complete and economical services at the Fireman's Training Center, as they possess the skills and experience required by the scope of this project. Resumes and proof of 40-hour, OSHA-mandated health and safety certification for the Unit's personnel may be provided upon request, as will proof of enrollment in an annual medical monitoring program.

OMB CIRCULAR A-87 COGNIZANT AGENCY

NEGOTIATION AGREEMENT

Page 1 of 2

Department of Public Works Date: October 15, 1991

County of Nassau

Mineola, New York Filing Ref: May 18, 1989

The indirect cost rates contained herein are for use on grants and contracts with the Federal Government to which Office of Management and Budget Circular A-87 applies, subject to the limitations contained in the Circular and in Section II, A, below.

SECTION	т:	RATES
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Type	Effecti From	ve Period To	Rate	Base
Final: Sanitation - Fringe Benefits Sanitation - Indirect Cost Sanitation - Fringe Benefits Sanitation - Indirect Cost	1/1/87	12/31/87	56.90%	(a)
	1/1/87	12/31/87	56.31%	(b)
	1/1/88	12/31/88	57.8 4 %	(a)
	1/1/88	12/31/88	60.18%	(b)

Basis for Application

- (a) Direct salaries and wages.
- (b) Direct salaries and wages including fringe benefits.

Treatment of Fringe Benefits: Fringe benefits, including vacation, holiday, sick and administrative leave, applicable to direct salaries and wages are included in the fringe benefits rate.

SECTION II: GENERAL

A. LIMITATIONS: The rates in this Agreement are subject to any statutory and administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the Department/Agency or allocated to the Department/Agency by an approved cost allocation plan were included in the indirect cost pool as finally accepted; such costs are legal obligations of the Department/Agency and are allowable under governing cost principles; (2) The same costs that have been treated as indirect costs have not been claimed as direct.

SECTION 6 - AFFIRMATIVE ACTION WORK PLAN

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SECTION 7 - DESIGN PHASE WORK PLAN

SCOPE OF SERVICES

FIREMAN'S TRAINING CENTER REMEDIAL DESIGN

SERVICE 1: BIOVENTING SYSTEM PILOT AND DESIGN

Task 1.1 Soil Characterization

Prior to designing and implementing the bioventing pilot study, the vadose zone and contaminated soils from the 3 contaminated areas must be tested to determine pilot design parameters. Initially, soil and gas samples will be analyzed in the laboratory and then field parameters will be developed to establish the final pilot operating conditions. Data must be collected on:

- soil gas survey (horizontal & vertical extent)
- permeability
- total porosity
- air filled porosity
- moisture content
- bulk density
- total organic content
- oxygen/carbon dioxide/hydrocarbon ratios
- nutrient levels optimum formulations for site biodegradation
- soil adsorptive affinity for ammonium and phosphate
- baseline bacteriological counts
- hydrocarbon degraders

Soil samples and soil gas will be collected from soil borings and sent for both contaminant and biological testing in Envirogen's customer service laboratory.

The soil will be characterized as follows:

Chemical Characterization

All collected samples will be analyzed for general chemical characteristics—moisture content, pH, nutrients (N, P), and total oil and grease, BTEX, semi-volatiles, BNAs, hydrocarbons. This characterization will provide general information concerning the nature of the hydrocarbon components and their potential for biotreatment. (Analytical methods are based on SW-846 methodologies with minor modifications developed at Envirogen.)

Biochemical Characterization

The purpose of the biochemical characterization is to evaluate the levels of indigenous microorganisms present and inorganic nutrient supply conditions. The minimum number of viable indigenous microorganisms present in the soils will be enumerated. Nitrogen, in the form of soluble ammonia and phosphorus, in the form of soluble orthophosphate, will be quantified. Soil pH will be tested to see whether it is within the range suitable for most microbial activities (6 to 8).

Task 1.2 Pilot Study Design

The pilot study must be designed to determine the placement of injection/extraction wells, the rates of air flow to be tested, the expected pressures and soil vacuum achieved, the duration of the study, the parameters and data to be collected, the method of data collection, equipment needs, and sampling requirements. Due to the time constraints of the project, it is advisable to design the pilot program to allow the use of pilot study equipment for the full scale bioventing treatment system where possible.

Subtask 1.2.1 Vacuum/Bioventing Well and Vapor Probe Installation

One vacuum extraction well and two bioventing wells will be installed in three borings in each area of contamination.

Each vacuum extraction/bioventing well boring will be appropriately sealed and cased. Two borings will be advanced for the installation of two ENVIROGEN-developed soil vapor probes. Multiple soil-gas vapor probes will be installed using an AMS™ Soil Gas Vapor Probe System to monitor vadose zone vacuum and/or pressure readings and bioactivity/transport parameters.

Subtask 1.2.2 Field Pre-Engineering Test

In order to evaluate the effectiveness of the soil vapor extraction/bioventing wells and to optimize the pilot system design, Envirogen will conduct an 8 hour SVE test, followed by a 5 day in-situ respiration test.

Point Permeability and Soil Vapor Extraction Tests

The SVE test consists of two phases: Point Permeability Testing (PPT) and an 8-hour vacuum test. The PPT will be run at the site in order to collect data to estimate the air permeability of the unsaturated zone. Air will be injected into the unsaturated zone and a vacuum induced to simulate mass air movement during the bioventing operation. Both vacuum and pressure will be monitored at the various monitoring points. The air permeability of the formation will be estimated from the data.

The soil vacuum extraction test will be run for a maximum of 8 hours, depending on soil permeability, to determine the radius of influence of the vacuum in the unsaturated soils. Off-gas measurements will be made at all extraction and monitoring wells.

In-Situ Respiration Test

Aerobic oxidation of hydrocarbons results in the production of CO_2 and the utilization of O_2 and hydrocarbons. A change in the ratio of these gases coupled with known soil/gas diffusion rates give a good indication of the rate of hydrocarbon biodegradation in the soils.

Helium is an inert tracer gas which will be used to assess the extent of diffusion of soil gases within the aerated zone. Air with 1% helium will be injected into one or more bioventing wells. The soil gas will be measured for O_2 , CO_2 , helium and total hydrocarbons before air injection and at 2, 4, 6, and 8 hour intervals and then every 4 to 12 hours, depending on the rate of oxygen utilization. The in situ respiration test will be terminated when the O_2 level is about 5%, or after 5 days of sampling.

Task 1.3 Pilot Study

The strategy behind the three month pilot study is to intensify the bioremediation effort in the highly contaminated deep soil areas. Despite a very subtle flow of compressed air into the vadose zone, the minimal volatilization and gradual diffusion of the contaminants into the thin layer of water surrounding the soil particles will turn the vadoze zone into an active biofilter. We intend to minimize or eliminate the need for off-gas treatment by supplying injected air only as our oxygen source in the subsurface.

The CDM team will complete five subtasks during the course of the pilot study. The following subtasks require completion:

Subtask 1 - Planning, Design and Mobilization

Subtask 2 - Equipment Procurement and System Installation

Subtask 3 - Monitoring

Subtask 4 - Interim/Final Reporting

Subtask 1.3.1 - Planning, Design and Mobilization - involves the review of all existing site characterization reports and data to verify contaminant profiles, permeability issues, required air injection volumes and site layout and history. Results of the five day completed pre-pilot study will be evaluated to determine well placement and radius of influence for each bioventing well. An attempt will be made to nest wells together for the purpose of bioventing/biosparging. A determination will be made as to whether nutrient addition is required for this site. Included in this task is a site kick-off

meeting where site-specific rules are reviewed and communication channels established. This task will also serve to ready personnel for the three month pilot study, spec, equipment and prepare the project management set up.

The overall pilot system will be designed to work off a single compressor station where wells throughout the site are manifolded together to allow direction of air flow. The equipment is such that it can be moved around the site with a forklift, or can be left stationary at a single staging area. The system will be designed to allow the turn-on/turn-off of wells in specific zones within the contaminated area. The overall system will be operated in pulses to maximize the efficiency of oxygen provision to the microbes.

Ultimately, this task will conclude with a detailed work plan addressing well/point location and construction, hardware location and utility use planning, procurement of consumables for the test (nutrients, pH adjusters, preparation of microbial cultures), establishment of a detailed schedule and preparation of a monitoring plan for three months of operation.

<u>Subtask 1.3.2 - Equipment Procurement and System Installation</u> - A series of bioventing wells and a minimum of three sets of soil monitoring points will be installed as determined under task 1.2. All bioventing wells will be constructed with 2" slotted well screen. Every attempt will be made to use previously installed wells and most certainly wells used during the five day pilot test.

It is estimated the installation will require ten days to complete. For budgeting purposes, it is assumed that auger cuttings and decon water will drummed and left onsite for classification and disposal by the client.

<u>Subtask 1.3.3 - System Startup/Operation</u> - this task involves a week of engineering time. After the system is turned on, the engineer will monitor the system gages to ensure optimal performance. At this time, the system operator will maintain and monitor the system according to the schedule established.

<u>Subtask 1.3.4 - Monitoring</u> - involves the actual weekly checkup on the compressor system and taking of readings from the individual gases associated with the system. Onsite sampling will also be conducted and approximately 5 samples per sample event will be collected for analysis at a local laboratory. In addition, staff will inspect the system once per week during the three month operation. Envirogen staff will provide technical data management for the life of the pilot study.

In addition to sampling exhaust gases for contaminant levels, dissolved oxygen will be measured in performance wells during the remediation. Remediation progress will further be monitored through measurements of VOCs and CO₂ in the vapors monitoring points. These measurements will be used to estimate contaminants removed by in situ volatilization and bioremediation,

respectively. In addition, soil borings will be drilled at the completion of the test. Soil samples recovered will be analyzed to directly measure contaminant removal from vadoze zone soils. Microbe counts will also be performed on vadose zone soil samples to directly measure biological activity and compare to reduction in nutrient concentrations.

Task 1.4 Pilot Study Report

At the conclusion of the field pilot testing, the CDM team will prepare a pilot study report. This Pilot Study Report will include a discussion of field observations, a summary of data collected, sample analytical data, determination of intrinsic soil permeability, and an assessment of practical implementation of bioventing at the FTC site. This report will also provide full scale pilot test design criteria based on the pilot testing results. Ten draft copies will be delivered to the County and State for review. Comments from the review will be incorporated in a final document and ten copies of the final documents will be submitted to the County.

Task 1.5 Design of Full Scale Bioventing System

A full scale bioventing system for the deep soil contaminated areas will be designed on the basis of pilot work performed, and a preliminary design report and biddable plans and specifications prepared. The design will include the extraction and soil gas monitoring wells, injection wells, nutrient delivery system (if needed), compressors, vapor treatment processes (if needed), piping, electrical systems, instrumentation, and system monitoring equipment. The design will be integrated into an overall site remediation program to include onsite and offsite groundwater extraction and treatment systems. Limited amounts of treated groundwater may be used for the injection of nutrients into the area of bioventing, or nutrients can be added in gaseous form.

The design will provide the flexibility to incorporate one of several operating modes. The first mode of operation is a bioventing system for biodegradation of volatile, semi-volatile and non-volatile contaminants and limited extraction of volatile compounds. The second mode is a vapor extraction system designed to remove the volatile contaminants from the deep soils. The third mode of operation, which is an option described in task 11, is potentially a bioventing/vapor extraction/air biosparging system for removal of contaminants from the shallow groundwater regime (smear zone) to allow either biodegradation or extraction of the volatile and semi-volatile constituents from both groundwater and unsaturated soils. The best mode of operation will be determined by the pilot studies.

The preliminary remediation plan encompasses three separate areas, namely the MUF, BAF and CMB. A grid pattern will be set up for the installation of injection and extraction wells within each area. The size of the cells will be determined from the pilot testing. Multilevel monitoring probes will be designed at various depths throughout the area to monitor water levels and

soil gas concentrations which will be used to optimize biodegradation of constituents.

The total soil vapor extraction flow will be from regenerative blowers with an appropriate turn down ratio to provide a flexible system. Nutrient addition may consist of a below grade leaching field over the contaminated areas with the percolation of nitrogen, phosphorous and other trace compounds into the subsurface on an intermittent basis as determined by field monitoring.

The need for air emission treatment will be determined during the pilot study, and the air stream may be combined with groundwater treatment emissions in a single treatment unit.

A preliminary design report, which includes conceptual design drawings, cost estimates and outline specifications, will represent approximately 10 percent of the final design. The outline specifications will contain equipment design criteria and preliminary sizing of equipment and facilities along with process and instrumentation diagrams. Ten copies of a draft of the preliminary design report will be submitted to the County and NYSDEC for review. This document will be revised, incorporating comments from the County and NYSDEC, and 10 record sets will be submitted.

Biddable plans and specifications and cost estimates will be prepared based on the final preliminary design report. A 90 percent draft of these documents will be submitted to the County and New York State for review. After incorporating review comments, 50 sets of final documents will be submitted to the County for their use.

Service 2: Capping of Shallow Contaminated Soils

There are three areas of shallow soil contamination (depth of 0 to 5 feet) associated with the three burn areas. All three areas have been paved to reduce infiltration of rainwater into the contaminated soils. The remaining areas will need to be capped, and the condition of the existing caps evaluated and, where needed, repaired or improved.

Task 2.1 Field Check of Existing Caps

All existing caps will be inspected to determine their condition and their ability to reduce the infiltration of rainwater into the soils below. Recommendations will be made to repair or improve the existing caps where necessary. Areas where the caps must be extended will be identified and surveyed for capping. The survey will be performed as part of the comprehensive site survey described under Task 4.4.

Task 2.2 Cap Design

The design of an asphalt/concrete cap for areas identified for repair and those area determined by the County to be in need of capping will be prepared and

included with plans and specifications developed for the site for the general construction contract for the groundwater treatment facility. If necessary, the required upgrades to the existing caps identified in Task 2.1 will be included as part of this task.

Service 3: Onsite Groundwater Extraction Well Design

Three onsite extraction wells have been identified in the ROD to contain and extract the groundwater from the two onsite plumes of contamination. The total flow rate from the three wells is projected to be 400 gpm. One has already been installed. Two additional wells must be designed as part of this service.

Task 3.1 Groundwater Model

A 3-dimensional groundwater model for the site is proposed to be developed for use in the engineering and design of remedial measures for both the onsite and offsite groundwater contaminant plumes.

The model will be calibrated to two steady state conditions, and particle tracking will be employed to simulate the present and projected extent of the plume. Modeling is considered critical to the efficient design of the groundwater extraction system, and is needed to address the following objectives:

- Estimate the aquifer hydraulic conductivity for use in extraction and injection well design.
- Simulate and better understand the 3-dimensional groundwater flow patterns in the aquifer that includes the presence of significant, discontinuous clay layers.
- Determine the placement and screen depths of the recommended extraction wells. The selection of 12 extraction wells and the recommended flow rate of 1,800 gpm should be verified on a 3-dimensional model prior to design.
- Estimate the effect of public supply pumping on the movement of the contaminant plume, and verify on a 3-dimensional groundwater model that the designed extraction system is capturing the plume.
- Estimate the influent contamination concentrations to the treatment system over the life of the project.
- Determine the location and effectiveness of using some injection wells, both onsite and offsite, to decrease the duration of the remediation, now projected to last 12 years.

- Determine the placement of injection wells onsite to avoid capturing groundwater from the northern part of the site that is more heavily contaminated with leachate from the landfill.
- Determine the need for a pulsed pumping schedule or varying rates of pumping over the course of the remediation to decrease the length of time needed to achieve groundwater cleanup criteria.
- Estimate the effect of the Town of Oyster Bay Landfill recovery system on the FTC extraction system.
- Estimate the duration of the remediation, and monitor the progress of plume remediation over the life of the extraction system. The FS estimated the time to extract one pore volume of the offsite plume area at 4 years, and that remediation would require 3 pore volumes to be extracted.

Model development criteria will be defined in close cooperation with the County, who will be apprised of its status as the development proceeds. Work sessions are planned to communicate and coordinate this effort with County personnel.

Task 3.2 Design of Two Extraction Wells

The location and screen depths will be selected and designed for two new onsite extraction wells plus needed modifications to the existing extraction well. The groundwater model will be used to help select the location, screen depth, and required flow rates for each well. The extraction system must be designed in conjunction with the recharge system selected for the site. Proper design of the recharge system could decrease the duration of the plume remediation because the use of pulsed pumping, combined with the injection and extraction well locations and operation mode, may prove effective in avoiding the creation of low flow rate zones within the contaminant plume.

A preliminary design report, which includes conceptual design drawings, cost estimates and outline specifications will represent approximately 10 percent of the final design. The outline specifications will contain equipment design criteria and preliminary sizing of equipment and facilities along with process and instrumentation diagrams. Ten copies of a draft of the preliminary design report will be submitted to the County and New York State for review. This document will be revised, incorporating comments from the County and New York State, and 10 record sets will be submitted.

Biddable plans and specifications and cost estimates will be prepared based on the final preliminary design report. A 90 percent draft of these documents will be submitted to the County and New York State for review. After incorporating review comments, 50 sets of final documents will be submitted.

Service 4: Onsite Groundwater Treatment

Task 4.1 Treatment System Design

The onsite groundwater treatment system is expected to have a capacity of 400 gpm, and will include:

- metals precipitation for iron and manganese
- sand filtration
- air stripping of volatile contaminants with emission controls
- GAC adsorption of semivolatile and other organic contaminants

The onsite groundwater treatment system process train has been determined in the Feasibility Study, and is designed to address high levels of BTEX, petroleum hydrocarbons, semivolatiles associated with #2 fuel oil, MEK, acetone, solvents, and leachate parameters including iron and manganese.

The onsite groundwater treatment system, along with the offsite groundwater treatment system, will be housed in a building located in the southwest corner of the site.

Metals precipitation will require the addition of chemicals, such as lime or sodium hydroxide to the influent water stream in order to raise the pH to levels high enough to precipitate the iron and manganese. Typically, pH of 10 to 10.5 would be necessary for this reaction. Because of the limited site area available for the process units, it is likely that a "high rate" clarification system such as a clariflocculator, containing flash mixing, flocculation, and clarification in one unit, would be used. After this unit, pH readjustment through the addition of sulfuric acid will be required prior to filtration. Filtration, as indicated above, is planned to follow the precipitation step as a means of removing unsettled particulates and avoiding air stripper fouling. In addition to these treatment processes, product skimmers would be installed at the extraction wells or oil/water separators will be designed as a contingency measure should the water table drop down to more normal levels and floating product reappear. The CDM team believes that the addition of a biological treatment process may prove to be a cost effective addition to the requested process train. CDM has proposed the piloting and design of a bioreactor to treat the biodegradable groundwater contaminants and reduce the potential cost of, and problems associated with off-gas treatment. This optional approach is described more fully in Task 11.2.

Carbon adsorption will be utilized for final effluent polishing. These carbon units would likely be pressure vessels and will typically require periodic backwashing to redistribute the carbon within the vessels and improve operational efficiency.

Air emission control measures will also be implemented as required. They may consist of regenerable carbon, biofilters, or thermal oxidation. Appropriate consideration will be given to chemical delivery and storage

practices to avoid further site pollution and ensure compliance with regulations in force.

Waste products generated in the process, such as sludge from the metal precipitation unit and sand filtration unit, need to be appropriately handled and disposed of. Equipment would be designed to dewater the sludge for offsite disposal.

A preliminary design report, which includes conceptual design drawings, cost estimates and outline specifications will represent approximately 10 percent of the final design. The outline specifications will contain equipment design criteria and preliminary sizing of equipment and facilities along with process and instrumentation diagrams. Ten copies of a draft of the preliminary design report will be submitted to the County and New York State for review. This document will be revised, incorporating comments from the County and New York State, and 10 record sets will be submitted.

Biddable plans and specifications and cost estimates will be prepared based on the final preliminary design report. A 90 percent draft of these documents will be submitted to the County and New York State for review. After incorporating review comments, 50 sets of final documents will be submitted.

Task 4.2 Effluent Recharge

Potentially viable recharge options for the onsite treatment plant effluent are:

- an existing onsite recharge basin,
- an existing offsite recharge basin,
- new onsite injection wells.

The onsite recharge basin, targeted as a possible recharge option, may contain contaminated sediments that must be removed prior to use. The feasibility of using the onsite basin will have to be determined by performing sediment tests, infiltration tests, and soil borings. The use of the recharge basin will be compared to the use of injection wells or to the use of the offsite basin. The use of onsite injection wells, in conjunction with the bioventing system, and possibly in situ bioremediation, may be helpful in decreasing the duration of the plume cleanup as noted previously. This can be accomplished by altering the flow field to avoid capturing the landfill leachate plume, and by increasing flow velocities towards the extraction wells. The offsite recharge basin could be designed to also serve as a recharge system for the onsite groundwater remediation.

Plans and specifications will be prepared.

Task 4.3 Construction/Operation Plan

All site remedial activities described herein must be coordinated with ongoing firemen's training activities and construction of the expanded training facilities

presently being designed by the County. A plan for implementing the remedial activities to be designed under this proposal, without interfering with firemen's training and facilities expansion, will be prepared as part of the design for the remediation facilities.

This Construction/Operation Plan (COP) will be developed in close coordination with County and Fire Department personnel to ensure a clear understanding of the scheduling process. The specification and scheduling described in the COP will form part of the bid documents packages.

Task 4.4 Surveying and Geotechnical Investigations

Onsite and offsite topographical survey work necessary for the development of plans and specifications will be conducted. The survey work will also include definition of property lines and location of existing structures on and offsite. Surveying for pipe route easements has not been included in this proposal, since the extent of this work is not known at this time.

Geotechnical investigations will be performed in support of the design of all structures planned as part of the onsite and offsite remediation. The investigations will require the installation of soil borings at strategic locations on and offsite where structures and pipelines are planned. A geotechnical report will be generated as a result of this investigations to define foundation design criteria.

Recharge basins will also be tested under this task to determine their capacities and limitations in accepting treatment process effluent.

Service 5: OffSite Groundwater Extraction Well Design

The offsite plume extends over 4,000 feet to the south of the site. It ranges in depth from 35 to 55 feet near the FTC site boundary, to 185 to 305 feet near the leading edge of the plume. The ROD only requires the capture of the plume to a depth of 200 feet. Twelve offsite wells are requested in the RFP, with a total recommended flow of 1,800 gpm. These requirements were developed on the basis of a 2-dimensional, semi-analytical flow model analysis. CDM recommends that the design assumptions be checked using a 3-dimensional flow model, as discussed in task 3.1.

Task 5.1 Extraction System Design

Twelve extraction wells (or fewer if modeling indicates a more effective alternative that is acceptable to NCDPW and NYSDEC) will be designed under this task. The locations and screen depths will be determined based on existing monitoring well logs, and by using the groundwater model. The extraction rates for each well will also be determined based on groundwater simulations of the capture zones for each well.

No pump test is anticipated for this task. This is primarily due to the high cost and regulatory constraints placed on the disposal of the contaminated water

from the pump test. The hydraulic characteristics of both the Magothy and Upper Glacial aquifer in the area can be estimated from the existing well logs and from the groundwater model calibration, allowing for the design of extraction wells without site specific pump tests.

A piping system will be designed to convey the water from the extraction wells through the Bethpage State Park to the FTC site treatment facility. The piping will be limited to existing golf cart pathways to limit disruption to park activities. Plans and specifications will be prepared for the construction of the wells, pumps, piping, electrical systems, instrumentation, and other related work, for incorporation in the main body of the construction document.

For the purposes of estimating costs, it is assumed that 12 extraction wells will be designed, and that an electrical/instrument control building will be located inside the park.

Service 6: Off-Site Groundwater Treatment

The offsite contamination plume consists of chlorinated volatile organic chemicals with the highest measured levels of total VOCs at approximately 1,000 ppb. The treatment system will be designed with an extraction capacity of 1,800 gpm.

Task 6.1 System Design

An air stripping system will be designed to treat groundwater extracted from the offsite plume. The unit will be located next to the onsite groundwater treatment system to allow treatment and design flexibility, and to reduce operating and maintenance costs. Plans and specifications developed for this service will be incorporated with the design package submitted under service 4.

The need for air emission controls, similar to the onsite groundwater treatment installation, will be assessed based on the air stripping tower's design and the expected mass emission rate and maximum contaminant concentrations. Combination of the air emission controls required for the bioventing and onsite groundwater treatment systems will be considered in optimizing construction and operation costs.

Service 7: Offsite Recharge Feasibility Study

Task 7.1 Recharge Options Evaluation

A basin recharge option and an injection well option will be evaluated considering cost, the effect of recharge on the onsite and offsite flow field and plume remediation, and viability. Injection wells are expensive to operate; however, they could potentially be used to decrease the time needed to remediate the offsite plume (presently estimated to be 12 years), thereby reducing overall lifetime project costs. By carefully selecting locations and

rates of injection, the flow field can be manipulated to increase flow rates towards the extraction wells and to provide a barrier between the landfill plume and the FTC plume. Both effects could help in reducing the cost of the remediation.

Injections Wells

Considering the hydrogeologic complexity of the site, the CDM team would recommend that a pump test be performed prior to the design of injection wells. However, implementation of a pump test in a contaminated aquifer zone on Long Island is not considered practical within the time constraints of this project. This is primarily due to the difficulty in handling the contaminated groundwater. Hauling water offsite for treatment and disposal is prohibitively expensive, and getting a State discharge permit to discharge to a recharge basin would significantly delay the project.

In lieu of pump test data, the CDM team proposes to use existing published hydrogeologic data, supplemented with boring logs from site monitoring wells. In addition, the existing pump test data from the onsite pump test performed by the NCDPW will be reviewed, and transmissivity estimates made. The groundwater model, if implemented, will also be used to provide estimates of the hydraulic properties of the aquifers.

Existing Recharge Basins

The existing offsite recharge basin appears to have sufficient capacity to handle the effluent; however, it is recommended that an infiltration test be performed at two locations within the basin to determine the infiltration rate of the basin floor. Double-ring infiltrometers will be used to perform the infiltration tests in the basin. Based upon USGS research using both 4-hour and 24-hour tests, infiltration rates of 2 to 3 feet per hour can be expected. This rate may decrease to 1 to 2 feet per hour after several hours once the soil beneath the basin becomes saturated. The CDM team proposes to perform one 24-hour test, with the results of the test included in the evaluation of this recharge option.

In order to determine if the basin is on top of a clay layer that may inhibit the long term infiltration of water to the groundwater system, a soil boring is recommended. The soil boring, with split spoon sampling performed at 3 foot intervals from the surface to the groundwater table, will help to characterize the deposits beneath the basin. This work is included in the geotechnical investigations provided under task 4.4.

Following the field testing and associated groundwater modeling simulations, planning level designs and cost estimates for the two options will be developed and incorporated in a technical memorandum. This data will be used to evaluate the recharge options. The expected benefits of injection wells in accelerating the groundwater plume remediation will be included in the

The design of a bioventing system makes use of an innovative technology. For this reason, the system parameters must be carefully monitored in addition to the environmental monitoring described above. A plan for the monitoring of the vapor extraction flow rates and vapor concentrations will be prepared. The plan will include periodic checks on the biological activity in the soil, and running calculations on the rate and total mass of contaminants removed.

A groundwater treatment system monitoring plan will also be prepared, including air emission monitoring, and influent and effluent monitoring to confirm the attainment of the discharge criteria and to assess the removal efficiency of the treatment system.

Ten copies of a draft plan will be submitted to the NCDPW and NYSDEC for review, comments will be incorporated, and 10 copies of the final plan will be submitted.

Service 9: Groundwater Sampling

The last complete round of sampling of onsite and offsite wells occurred more than two years ago. A complete round of sampling of 20 existing monitoring wells to provide the baseline data needed for the treatment system design will be conducted.

Task 9.1 Groundwater Sampling

Twenty wells will be sampled for TCL parameters, landfill leachate parameters, and semivolatiles (8 wells only). The laboratory analyses results will not have to be validated because the data will be used for engineering design purposes only.

In addition to the requested samples, 4 composite samples, will be tested for standard water quality parameters (e.g., pH, TOC, alkalinity). The composite samples will provide additional water quality data for the design of the groundwater treatment system.

Standard hazardous waste site sampling and laboratory techniques will be applied. All development water will be discharged onto the ground within 20 feet of the well, provided that the area of release is approved by the NYSDEC site representative and the following NYSDEC stipulated conditions are met:

- water is not permitted to migrate offsite
- there is no potential for contaminating a previously uncontaminated aquifer
- the discharge will not cause significant addition to ground surface soil contamination

Should it be impossible to comply with the above stipulated conditions, it will be necessary to drum purge water generated from the sampling round for offsite disposal by the County. The cost associated with this task assumes that testing and offsite disposal are required.

Service 10: Miscellaneous Tasks

In addition to the above listed services specifically requested in the RFP, a number of additional tasks have been identified that relate to the project.

Task 10.1 Monthly Progress Meetings/Reports and Project Management

Monthly progress meetings will be held throughout the 12 month project. We propose two standard agenda items for each meeting: review of the previous month's submission and presentation of new information. A written progress report will be submitted one week prior to each monthly meeting detailing the following: work performed during the reporting period; problems identified and resolved; anticipated problems and recommended solutions; upcoming activities during the next reporting period; percent completion of project; and updated project schedule with output in bar graph format. Following each progress meeting, minutes will be prepared and submitted to NCDPW.

Task 10.2 Health and Safety Plan

The plans and specifications must include requirements for a health and safety plan (HASP) for the contractor performing the construction. In addition, a HASP must be developed for project personnel to carry out site activities outlined in this proposal, such as groundwater sampling and pilot studies.

CDM completes a site-specific health and safety plan for each hazardous waste operation it conducts. CDM also maintains a comprehensive and explicit manual on the health and safety procedures required for hazardous waste operations.

All CDM personnel who perform work on or adjacent to the waste site must conform with applicable provisions of the following federal regulations and guidelines:

- OSHA Safety and Health Standards 29 CFR 1910 (General Industry), US Department of Labor, Occupational Safety and Health Administration, especially OSHA 29 CFR 1910.120, <u>Hazardous Waste Operations and Emergency Response</u>.
- OSHA Safety and Health Standards 29 CFR 1926 (Construction Industry),
 US Department of Labor, Occupational Safety and Health Administration.
- Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, US Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Institute for Occupational Safety and Health.

CDM Health and Safety Assurance Manual (HSAM). This HSAM is the controlling document for the project in terms of project health and safety and training policies and procedures.

The plan will include lines of authority and responsibility for health and safety, medical monitoring, training, and equipment programs, safety inspections, and health and safety record keeping. The site specific health and safety plan will address each of the topics or concerns OSHA requires in a health and safety plan for a hazardous waste operation.

Task 10.3 Permitting Assistance

CDM will assist NCDPW in identifying and preparing the required permit applications for the proposed remedial measure. CDM will meet with NYSDEC to discuss permitting requirements for this project. For the purposes of this proposal, it has been assumed that the following permit applications would be required from NYSDEC:

- State Pollutant Discharge Elimination System (SPDES)
- Long Island Well
- NYSDEC Industrial Chemical Survey
- Process, Exhaust or Ventilation System (air discharge)
- Chemical bulk storage (6 NYCRR Part 596)

The following permits are also assumed to be required: NCDOH Article XI, Toxic and Hazardous Materials Storage, Handling, and Control, and the Town of Oyster Bay Curb Cut Permit.

It is also assumed that in support of these applications a site plan will be developed that shows the route of all proposed pipes, collection lines as well as discharge line and the discharge location. A process flow diagram, tax map of the area and a detailed description of the remedial measure will complete application needs for the permits.

There is a potential that material will need to be supplied to the New York State Office of Parks and Recreation and Historical Preservation for a determination as to whether the proposed remedial measure will impact archeological artifacts. A separate report would then be required, summarizing the proposed remedial measure, defining the extent of any excavation, and providing pictures documenting the current condition of the site and a written description of how the excavation will be done and what equipment will be used.

After an initial meeting with the NYSDEC to finalize the list of permit applications required, CDM will prepare the permit applications and provide

them to NCDPW for their review. The final permit application package will be submitted to NYSDEC under the requirements of NYSDEC Uniform Procedures.

CDM will attend one meeting with NYSDEC following the submission of the permit applications to receive their technical comments. If additional material is requested by the NYSDEC, CDM will prepare and submit the material to NCDPW for approval and then submit it to NYSDEC.

Service 11 Bioreactor Pilot Study and Design

Task 11.1: Pilot Study and Design

A bioreactor pilot study will be performed using a 30-gpm GAC fluidized bed reactor (FBR) skid-mounted pilot unit. The objectives of the pilot are as follows:

- Demonstrate the effectiveness of the GAC FBR system in treating BTEX, acetone, MEK, and semivolatiles (PAHs), and define effluent loadings from the FBR process to be used in the design of downstream processes. In addition, the effectiveness of the FBR process in treating the more recalcitrant chlorinated volatile organics will be determined.
- o Define the relationship of loading rate (COD and contaminant specific) to effluent quality. It is planned to evaluate the performance of the FBR system at two different COD loading rates (high and low).
- o Determine various design parameters: oxygen uptake rate, nutrient (N, P) uptake, solids production rate, and solids quality (%solids and TCLP leaching).
- o Evaluate the removals of metals (Al, As, Cr, Fe, Mn, Ni, Pb) by the FBR process.

The proposed duration for the FBR pilot is 4 months. After that time, it may be worthwhile to operate the system longer at a significantly reduced staffing level and with minimal analytical monitoring in order to observe long term effectiveness. CDM's experience with the FBR system at a major gasoline spill on Long Island showed increasing removals of recalcitrant organics after 5 months of operation.

The FBR system will be furnished by Envirex (Model 30). Although the county currently has an older model 30 at another site, significant modifications (oxygen generation system, oxygen feed controls, DO monitoring equipment, etc) to Envirex's pilot units have been made such that a new unit is recommended. Based on preliminary site information, groundwater will be extracted from up to 2 existing monitoring wells. Piping and electrical service from the wells will be underground. If operation of the pilot during the

winter months is required, the County's shelter from the previous pilot will be used. If this is not available, the pilot can be furnished in an enclosed 40-ft trailer at additional cost.

The extracted water will be pumped to a 200-gal oil-water separator prior to the FBR. Following the FBR, treated effluent will flow into a settling tank to settle out the suspended solids. The effluent from the tank will be filtered and passed through GAC polishing units prior to discharge. The treated effluent will be discharged to either the nearby storm basin or to the sanitary sewer.

Prior to operation, a technical memo detailing proposed operation, test objectives, and data collection requirements will be developed and submitted to the County. During operation, field readings (temp, DO, pH) will be recorded on a daily basis. Field measurements of COD, nitrogen, and phosphorous will be performed twice per week using a field water quality test kit. Laboratory analytical samples will be collected and analyzed from the FBR influent and effluent on a weekly basis for the following parameters:

- o organics by method 601/602 (&MTBE optional)
- o PAHs by method 610
- o selected inorganics (A1, As, Cr, Fe, Mn, Ni, Pb)
- o conventional parameters (BOD, TOC, TDS, TSS, VSS)

Following completion of the 4-month period, a pilot test summary report will be prepared and submitted to the County.

PROJECT COST

The total cost of the project is not to exceed \$1,705,862. The cost includes CDM labor and profit, team consultant costs, and direct expenses.

A cost breakdown by task is provided on the spreadsheet entitled "Cost Estimate" Revised August 11, 1993.

(ftc/ftcosts)

RESOLUTION NO. 1124 - 1993

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE, OR HIS DESIGNEE, TO MAKE APPLICATION TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION TO ENTER INTO A NEW YORK STATE ASSISTANCE CONTRACT PURSUANT TO ARTICLE 52 OF THE ENVIRONMENTAL CONSERVATION LAW IN CONNECTION WITH THE DEVELOPMENT AND IMPLEMENTATION OF A REMEDIAL PROGRAM AT THE FIREMAN'S TRAINING CENTER, AND TO AUTHORIZE THE COMMISSIONER OF PUBLIC WORKS, OR HIS DESIGNEE, TO UNDERTAKE SUCH ACTIONS AND TO EXECUTE SUCH DOCUMENTS AS MAY BE NECESSARY RELATIVE TO SUCH STATE ASSISTANCE PROGRAM IN ORDER TO INSURE TIMELY IMPLEMENTATION ON THE PART OF NASSAU COUNTY OF SUCH REMEDIAL PROGRAM AND EXPEDITIOUS REIMBURSEMENT OF ELIGIBLE COSTS BY NEW YORK STATE OF EXPENSES INCURRED BY NASSAU COUNTY IN THE MATTER.

> Passed by Board of Supervisors on NOV 29 1993 votes for 108; votes against, none. Became a Resolution on NOV 29 iggs with the approval of the Deputy County Executive Acting for the County Executive.

WHEREAS, the County of Nassau has entered into an Order on Consent with the State of New York, Department of Law and Environmental Conservation, with respect to an inactive . hazardous waste disposal site known as the "Nassau County

Gi

Fireman's Training Center", in Old Bethpage, Town of Oyster Bay, Nassau County (herein the "Site");

WHEREAS, the aforesaid Order on Consent provides that the County shall develop and implement a remedial investigation/feasibility study, and remedial program (herein called the "Project"), designed to abate and eliminate the threat to the public health or environment at the Site and its off-site environs;

WHEREAS, Article 52 of the Environmental Conservation

Law, the Environmental Quality Bond Act of 1986, authorizes

financial assistance to municipalities for remediation of

inactive hazardous waste disposal sites by means of a written

agreement;

whereas, the County deems it to be in the public interest and benefit under this law to enter into a contract therewith;

whereas, State Assistance shall be provided to reimburse the County on a periodic basis for eligible Project costs as documented by a State of New York Standard Voucher, pursuant to the aforesaid contract;

WHEREAS, the County shall submit such reports, documents, data, contractual documents, endorsements and other information with respect to the Project as may from time to time be necessary; now therefore, be it

RESOLVED, that the County Executive, or his designee, is authorized to act in behalf of the County in all matters related to the aforesaid contract for financial assistance between the State and the County, including but not limited to the application for and the execution of the State

Assistance Contract, and for the execution of all documents and approval of all appropriate matters related to the Project; and, be it further

RESOLVED, that the Commissioner of Public Works, or his designee, is authorized to execute all appropriate documents and claim forms and act in behalf of the County in all other matters related to the State Assistance Contract, exclusive of application, acceptance, execution, or amendment of the aforesaid State Assistance Contract.

29 1993

Deputy County Executive

OPW.

STATE OF NEW YORK
COUNTY OF NASSAU

NºP58884

I, JOHN A. DeGRACE, Clerk of the Board, Nassau County Board of Supervisors, do hereby certify that the
I, JOHN A. DeGRACE, Clerk of the Board, Nassau County Board of Supervisors, do hereby certify that the foregoing is a true and correct copy of the original School 194-1953 duly
passed by the Board of Supervisors of Nassau County, New York, on Monthe 29/195
passed by the Board of Supervisors of Nassau County, New York, on Mountle 39,193 and approved by the County Executive on Mumuleu 39,193 and on file in my
office and recorded in the record of the proceedings of the Board of Supervisors of the County of Nassau and
is the whole of said original.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said Board of Supervisors,

his ______day of

in the year one thousand nine hundred and

JOHN DeGRACE

Clerk of the Board

Nassau County Board of Supervisors

FORM 86 100B 4/91

G. Heitman

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233 -7010



December 21, 1993

Mr. Peter Witkowski, P.E. Hazardous Waste Services Unit Nassau County DPW Mineola, NY 11501-4822

Dear Mr. Witkowski:

Re: Nassau County Fire Training Center (Site #130042)

DEC's cost eligibility guidelines for municipal consultant contracts have included maximum salary schedules that are eligible under the EQBA Title 3 grant program. These schedules have been revised based upon a review of contracts negotiated between DEC and its consultants working on hazardous waste sites. These new schedules are effective for all work performed by consultants for eligible activities performed on or after November 1, 1993.

We also amended the average salary schedules to be used when estimating project budgets for Title 3 work. These average salary schedules are also effective as of November 1, 1993.

Please note that only increased labor maximums have been incorporated into the new guidelines. No payments or grants will be decreased by the new cost guidelines.

If your consultant is also a standby contractor (or team member) for DEC under the Hazardous Waste Remediation Program, the rates included in the standby contract will be used by DEC as the maximum and average salary rates on the Title 3 program.

The maximum labor rates included in these tables and (in the standby contacts if applicable) are for determining eligible costs in the Title 3 grant program. The municipality is free to negotiate different rates with its consultant.

B.E.R.A.	
FOILABLE Y-N	FILE SECTION :
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Enclosed are copies of these new rates for your use. For sites where the project budget is approved and State payments have been made, these forms are provided for eligibility information for future payment requests. For projects where the State Assistance Contract is under negotiation, or a budget has not been approved by the Department, we recommend that the forms be completed by the consultant. These forms are also available in a WordPerfect file on a 3.5" disk for your consultants use.

Sincerely,

George W. Heitzman, P.E. Senior Environmental Engineer

Division of Hazardous Waste Remediation

Enclosures

GWH:mm

bcc: R. Cozzy

G. Heitzman

1) Type of Contract: Title 3 EQBA State Aid Municipal Haz. Waste Cleanup Name: Fac Californ 5-8403 3) Description of Contract: Amendment No. 1 to Contract No. C30005a with Nassau County will over the state's share (75%) of the costs assaulated with the remedial design of the remediation of the Nassau County Nassau County Fire Training Center. Site No. 1-30-04a 4) OSC Municipal EDP Code (Fiscal Mgt. Use) [5) Grantee's Federal I.D. No.							
4) OSC Municipal EDP	Code	(Fiscal Mgt.	use)		5) Grantee'	s Federal I.D. N	40.
6) CURRENT FISCAL	Dept	Cost Center	VAR	YR	Object Code	Amount	Fiscal Mgt. Use Only
YEAR ENCUMBRANCE TO RESERVE FUNDING	09	10 1. 9	· ·	1	43909	#1,304,317 ⁵⁰	
PRIOR TO FINAL APPROVAL			ļ				
7) Amount to be chare	7) Amount to be charged to 8) Fund Code/Name (Fiscal Mot Use)						
7) Amount to be charged to future appropriations: 8) Fund Code/Name (Fiscal Mgt. Use							

9) Approvals	Approver's Name (Please type or Print)	Initials & Date
Initiator	See Routing Slip	Secroutingslip
Division/Regional Director	M. O'Toole, Jr.	approved memography
Minority and Women's Business Compliance	B. \$ \$ 30/93	7
* Legal Affairs	M. Murray	N/A
Div. of Fiscal Mgt: Federal & Municipal Accounts		
Director of Fiscal Mgt.	R. Randles	N/A
Federal & Municipal Accounts	T. Stetson	N/A

REMARKS:	
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New York State Department of Environmental Conservation

MEMORANDUM

TO: FROM: SUBJECT: Michael J. O'Toole, Jr., Director, Div. of Haz. Waste Remediation Stephen B. Hammond, Director, Bureau of Central Remedial Action Conceptual Approval for a State Assistance Contract Amendment No. 1 to

Contract No. C300052 with the County of Nassau (Nassau County Fire

Training Center - Site No. 130042)

DATE:

JUL 40 1993

TYPE OF CONTRACT:

Title 3 "Municipal Hazardous Waste Cleanup" Program Element 3 Remedial Design (RD)

FUND NAME AND COST CENTER:

Funding Source: 1986 Bond Act

Cost Center: To be assigned.

Division of the Budget exemption approval is not required because this contract is funded from the Bond Act.

CONTRACT AMOUNT AND CONTRACT PERIOD:

Original Contract (RI/FS) $$3,144,000 \times .75 = $2,358,000.00$ Amendment No. 1 (Remedial Design) $$1,739,090 \times .75 = $1,304,317.50$

Total Contract \$ 3,652,317.50

Contract Period: February 9, 1989 - December 31, 1994

General Discussion and Justification (Background, Purpose, Scope of Work):

The Nassau County Fire Training Center is an active training facility for Nassau County's volunteer firefighters, located on a 12-acre site on Winding Road in the Town of Oyster Bay. The site is bordered on the northwest by the Old Bethpage Landfill and on the south and west by the Bethpage State Park. A Remedial Investigation/Feasibility Study for the site was completed and a Record of Decision was signed on February 26, 1993. The Remedial Investigation delineated four contaminated media: shallow soils, deep soils, on-site groundwater and off-site groundwater. The off-site groundwater plume threatens active supply wells of the Farmingdale Village Water District.

New York State's selected remedial action is capping of shallow soils, in-situ bioventing of deep soils, and extraction and treatment of both on-site and off-site groundwater. Because bioventing is an innovative technology, a pilot study will be performed to assist in design of the full-scale system. Other studies proposed as part of the design are: groundwater mode ling of on-site and off-site contaminants to optimize the extraction system investigation of air sparging and a bioreactor as alternative on site treatment methods, and investigation of alternative off-site groundwater recharge locations. This amendment will fund up to 75% of the cost for this remedial design.

<u>Alternative:</u>

None. No other feasible method exists to accomplish this wark with State personnel.

Affirmative Action Issues:

MBE goals = 15 percent

WBE goals = 5 percent EEO goals = 10 percent female, 10 percent minority

DEC Organizational Units and/or Government Agencies Involved:

Division of Hazardous Waste Remediation Division of Environmental Enforcement New York State Department of Health

DEC Attorney and Potential Legal Issues:

Contract Attorney - Meta Murray Program Attorney - Robert Davies

cc: B. Moulhem, BMWBC



June 28, 1993

Roy F. Weston One Old Country Road Suite 430 Carle Place, New York 11514

Attn: Mr. Roger Wilhelm

RE: Fireman's Training Center

Request for Proposals

Gentlemen:

Thank you for your recent Request for Proposal (RFP) submittal for the Fireman's Training Center Remedial Project, in Bethpage.

The County has completed its review of the RFP's, and we regret to inform you that your firm was not selected as the consultant for this project. The County, however, will note your firm's hazardous waste remediation qualifications and may consider your services in the future.

Again thank you for your interest and should you have any questions, please contact Mr. Peter J. Witkowski, Director of Hazardous Waste Services, at (516) 571-9600.

John M. Waltz, P.E. (

ery truly yours

Acting Commissioner of Public Works

JMW:PJW:jm

Common No. 1 Common No. 2 Commo



June 28, 1993

Camp Dresser & McKee 100 Crossways Park West Woodbury, New York 11797

Attn: Mr. Michael Memoli

RE: Fireman's Training Center

Request for Proposals

Gentlemen:

Thank you for your recent Request for Proposal (RFP) submittal for the Fireman's Training Center Remediation Project, in Bethpage.

The County has completed its review of the RFP's, and we are pleased to inform you that Camp Dresser & McKee has been selected as the Fireman's Training Center Remediation Project consultant, contingent upon successful final contract negotiations.

The County will contact you in order to begin the negotiations of an engineering services contract. In the meantime, should you have any questions, please contact Mr. Peter J. Witkowski, Director of Hazardous Waste Services, at (516) 571-9600.

<u>V</u>ery truly yours,

fohn M. Waltz. P.E. Acting Commissioner of Public Works

JMW:PJW:jm

cc: Robert J. McDonald, Chief Deputy County Executive Owen B. Walsh, Chief Deputy County Attorney James A. Oliva, Acting Head, Division of Sanitation and Water Supply George Heitzman, P.E., New York State Department of Environmental Conservation



June 28, 1993

Blasland & Bouck Engineers, P.C. One Barker Avenue White Plains, New York 10601-1517

Attn: Mr. William McGimpsey

RE: Fireman's Training Center Request for Proposals

Gentlemen:

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Very truly yours,

John M. Waltz, P.E.
Acting Commissioner of Public Works

· manda.

JMW:PJW:jm

cc: Robert J. McDonald, Chief Deputy County Executive
Owen B. Walsh, Chief Deputy County Attorney
James A. Oliva, Acting Head, Division of Sanitation
and Water Supply
George Heitzman, P. E., New York State Department of



June 28, 1993

Dunn Corporation 12 Metro Park Road Albany, New York 12205

Attn: Mr. David Rollins

RE: Fireman's Training Center Request for Proposals

Gentlemen:

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Very truly yours,

John M. Waltz, P.E.>> Acting Commissioner of Public Works

JMW:PJW:jm

cc: Robert J. McDonald, Chief Deputy County Executive
Owen B. Walsh, Chief Deputy County Attorney
James A. Oliva, Acting Head, Division of Sanitation
and Water Supply



June 28, 1993

Dvirka and Bartilucci 6800 Jericho Turnpike Syosset, New York 11791

Attn: Mr. Thomas Maher

RE: Fireman's Training Center Request for Proposals

Gentlemen:

Thank you for your recent Request for Proposal (RFP) submittal for the Fireman's Training Center Remedial Project, in Bethpage.

The County has completed its review of the RFP's, and we regret to inform you that your firm was not selected as the consultant for this project. The County, however, will note your firm's hazardous waste remediation qualifications and may consider your services in the future.

Again thank you for your interest and should you have any questions, please contact Mr. Peter J. Witkowski, Director of Hazardous Waste Services, at (516) 571-9600.

hn M. Waltz, P.E.

Acting Commissioner of Public Works

JMW:PJW:jm

cc: Robert J. McDonald, Chief Deputy County Executive Owen B. Walsh, Chief Deputy County Attorney James A. Oliva, Acting Head, Division of Sanitation and Water Supply



June 28, 1993

ERM-Northeast 175 Froehlich Farm Boulevard Woodbury, New York 11797

Attn: Mr. John DeFilippi

RE: Fireman's Training Center Request for Proposals

Gentlemen:

Thank you for your recent Request for Proposal (RFP) submittal for the Fireman's Training Center Remedial Project, in Bethpage.

The County has completed its review of the RFP's, and we regret to inform you that your firm was not selected as the consultant for this project. The County, however, will note your firm's hazardous waste remediation qualifications and may consider your services in the future.

Again thank you for your interest and should you have any questions, please contact Mr. Peter J. Witkowski, Director of Hazardous Waste Services, at (516) 571-9600.

Very truly yours,

ohn M. Waltz, P.E

Acting Commissioner of Public Works

JMW:PJW:jm

cc: Robert J. McDonald, Chief Deputy County Executive Owen B. Walsh, Chief Deputy County Attorney James A. Oliva, Acting Head, Division of Sanitation and Water Supply

THOMAS S. GULOTTA COUNTY EXECUTIVE



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

June 10, 1993

Malcolm Pirnie, Inc. One International Boulevard Mahwah, New Jersey 07495-0018

Attn: John Isbister

RE: Fireman's Training Center

Reallocation of Funds to Complete Revisions

to the Feasibility Study Report

Capital Project S81020C

Gentlemen:

Please refer to your letter of February 18, 1993, requesting a justification for costs not approved by the County, concerning the Feasibility Study (FS) Report comments.

First, please be aware that the County had no problems with the costs for the recalculation of pore volumes, preparation and attendance for the November 30, 1992 meeting, and the review of the Preliminary Remedial Action Plan. The County does disagree with what seems to be excessive manhours for basically repetitive minor additions and editorial charges for work submitted for bioremediation, the scoring system, institutional controls and air emissions.

The County, due to time constraints, did direct Malcolm Pirnie verbally to complete all work referenced in your February 18th letter, prior to receiving a proposal. Since all work was done satisfactorily and on time, the remaining funds requested, \$6,088.77, are approved. Authorization is therefore given to reallocate \$6,088.77 from Work Item Three to Work Item Twenty-Four. However, the County strongly feels that the manhours expended were excessive for the work submitted by a firm that has the expertise in groundwater investigations and remediations.

Malcolm Pirnie, Inc.
June 10, 1993

Page Two

RE: Fireman's Training Center

Reallocation of Funds to Complete Revisions

to the Feasibility Study Report

Capital Project S81020C

If you have any questions, please contact Mr. Peter J. Witkowski of our Hazardous Waste Services Unit, at (516) 571-9600.

Very truly yours,

John M. Waltz, P.E.

Acting Commissioner of Public Works

JMW:PJW:jm

✓cc: George Heitzman, F.E., NYSDEC

William aboth PE.





MALCOLM PIRNIE, INC. ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

February 18, 1993

Mr. John M. Waltz, P.E.
Acting Commissioner of Public Works
County of Nassau
Department of Public Works
Mineola, New York 11501

Re: Nassau County Fireman's Training Center

Reallocation of Funds to Complete Revisions

to the FS from NYSDEC Comments

November 13, 1992/Capital Project Number: S81020C

Dear Mr. Waltz:

In our letter of December 1, 1992 we requested \$12,500 to respond to NYSDEC comments on the FS report as summarized in their letter dated November 13, 1992. As requested by Ken Arnold, we also provided, in our letter of December 9, 1992 (attached), a detailed breakdown of the costs by task and manhours.

In your letter of December 30, 1992, you approved \$6,411.23 of the \$12,500 requested and stated that the County feels that the \$12,500 requested was excessive as compared to the level of work required and submitted. However, the County does not identify which task(s) summarized in our letter of December 9, 1992 was excessive, nor do you dispute their legitimacy. This letter identifies eight tasks associated with comments to the FS. The majority of these tasks were less than \$2,000 and accurately reflect the level of effort that was necessary to complete them. The work associated with addressing these comments was a legitimate out-of-scope service and was completed in a responsive, technically appropriate and expeditious way. We completed these comments in a good faith effort prior to receiving written authorization in order to meet your deadline of December 7, 1992. Although Ken Arnold requested a breakdown of the cost associated with these services, we did not believe they would be disapproved. In addition, these costs also were able to cover additional minor comments received verbally by Ken Arnold on December 9, 1992 after the County and NYSDEC reviewed our submission of December 7, 1992.





Mr. John Waltz Nassau County DPW February 18, 1993 Page 2

We believe that the work effort we expended on addressing these comments is justified and we therefore request that Work Item No. 24 be increased by \$6,088.77 to cover the cost of these services.

Very truly yours,

MALCOLM PIRNIE, INC.

Terrance R. Haelen

Senior Project Hydrogeologist

c: Ken Arnold, NCDPW

John Isbister, MPI Maureen Sullivan, MPI

dt

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MALCOLM PIRNIE, INC. ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

December 9, 1992

Mr. James A. Oliva, P.E.

Director of Environmental Operations
Acting Head, Division of Sanitation
and Water Supply
Nassau County Department of Public Works
County Executive Building
Mineola, New York 11501

Re: Nassau County Fireman's Training Center/Budget Estimate

To Respond to Feasibility Study Comments

Capital Project No. S81020C

Dear Mr. Oliva:

As requested by Ken Arnold, I am providing the County with a breakdown of the cost estimate to respond to the NYSDEC's comments on the Feasibility Study for the Fireman's Training Center. In our letter of December 1, 1992, we had requested \$12,500 to address the comments and finalize the Feasibility Study Report for submission to the County by December 7, 1992. The cost is broken down by task and manhours and is summarized in the attached table. Depending on the States final review, additional cost may be incurred.

If you have any questions, please call.

Very truly yours,

MALCOLM PIRNIE, INC.

Terrance R. Haelen Project Manager

dt

c: K. Arnold, NCDPW P. Witkowski, NCDPW

M. Sullivan, MPI

J. Isbister, MPI

32/7190 oliva6.kr

TASK	Ь	PE/PS	ES	ТЕСН	TOTAL.
	\$161	001\$	\$80	05\$	
Bioremediation - Inclusion of bioremediation technologies in the detailed analysis section of the report. Obtain additional information on bioventing and biosparging developed cost for bioremediation technologies.	2	3	32	4	3,382
Inclusion of institutional controls		1	4	2	0")
Elimination of scoring system, replaced by a narrative on remedial alternatives.	2	3	77	\$	2,132
Re-calculation of costs for off-site groundwater on a pore volume basis/appropriate revisions to tables and text.	1	1	8	3	1,051
Inclusion of a brief discussion on air emission controls for each technology with a potential for air emissions.		1	10	2	1,000
Response to minor comments.	1	3	14	4	1,781
Preparation for and attendance at meeting November 30, 1992		8			800
Review of NYSDEC PRAP		4	4		720
TOTAL HOURS	9	24	94	20	(
SUBTOTAL DOLLARS	996\$	\$2,400	\$7,520	\$1,000	\$11,886
OTHER DIRECT COSTS					\$ 614
TOTAL:					\$12,500



S. Ydoityman

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233



FEB | 9 | 1993

Mr. Kenneth G. Arnold, P.E. Hazardous Waste Services Unit Nassau County Department of Public Works 425 Salisbury Park Drive Westbury, New York 11590

Dear Mr. Arnold:

RE: Nassau County Fire Training Center - Site No. 130042
Drum Removal Proposal

This is to confirm our February 18, 1993 conversation regarding Malcolm Pirnie's February 3, 1993 proposal for removal of contaminated drill cuttings from the site. The selection of the contractor appears to satisfy EQBA procurement requirements, and the oversight budget appears to be reasonable for the scope of work. Therefore, the cost of this work should be fully eligible for State reimbursement.

Please call me at 518-457-1641 if you have any further questions.

George W. Heitzman, P.E.

Senior Engineer
Bureau of Central Remedial Action
Division of Hazardous Waste

Remediation

GWH:mm bcc: R. Cozzy

G. Heitzman

B.E.R.A. FILE SECTION

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MALCOLM. PIRNIE

MAI COLM PIRME, INC.

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hebruary 3, 1993

Mr. Kenneth G. Arnold Sanitary Engineer 2 Nassau County Department of Public Works 425 Salisbury Park Drive Westbury, New York 11590

Ret Nassan County Fireman's Training Center Capital Project No. S81026C Drum Removal

Dear Mr. Arnold:

As requested, I am provide given with a preakdown of costs for the drum remove activities at the Fireman's Training Center. The estimate inches costs of Mulcolm Planes aborder oversight of the drum removal as well as the estimated costs from the content of Nasara County selected, Clean Venture, Inc. The cost of Mulcolm Figure subfractors and content scope services related to solicitation of new bids from the three contractors and content negotiation with Clean Venture. The table below shows Manualm Plane's estimated costs for the drum removal activities.

Task	PM (\$151)	SPE/P5 (\$110)	ES (\$70)	Cost	
FIELD WORK:				<u>-</u>	
Drum Transfer Oversight Sampling Removal of Solls		2 1 1	24 8 8	\$ 1,960 \$ 670 \$ 670	
Subtotal					
Review Test Results, Prepare Report	4	۲	10	\$ 1,964	
Other Direct Costs				\$ 276	
Subtotal				\$ 2.24)	
OUT-OF-SCOPE SERVICES: Solicit bids from 3 contractors Contract Negotiating		žτ		\$ 2,640	
Total Ma	lculra Pirnie C	'est	Table Company Company Company	5 8,12	
Subcontractor's Cost					
TOTAL	OST:	The state of the s		\$19.859	

December 8, 1992

Mr. Terry Haelen Malcolm Pirnie, Inc. One International Blvd. Mahwah, New Jarsay 07495-0018

Re: CVI Progesal #120892-1

Dear Terry:

Clean Venture, inc. is pleased to subtly this proposal for bulking of soil, analysis, transportation and discosal of 195 drums of artill spoils at the Nassau County Firemanic Training Center in Old Bethpage, New York.

Clean Venture, Inc. (EVI) to a chemical, oil and industrial waste management firm with experience in all aspents environmental contracting, including size invest sampling, analyses, site remediation, transportation and CVI has the technical expertise, equipment, mark facilities required to successfully meet your project need

All Clean Venture, Inc. employees working on this project have a minimum of 40 hours training, as meneaged by the Occupational Safety and Health Administration (502 50 0FF 1910.120. In addition, personnel are monthored accusally (60) to medical surveillance program.

Clean Venture will supply all personnel, materials. | | | | | | | | | | | and documentation required to complete this turnley pro-

Clean Venture is aware of and adheres to all feires or and local laws and ordinances. Clean Venture, in confinition of lycle Chem, Inc. form an environmental service group and distant facility capable of solving and eliminating most but it in . involving chemical and hazardous wastes.

Pricing is based on our discussive on December 8, 1992, inectfying asphalt batch recycling as the targeted discosely

1/22 P.D. No. 1 - Box 2028 82 Midlered Averses

806-P talkwood Colet

option.

Prior to loading the dump trailers, an event spread will be placed at the tail gate and the trailer will in lines with a mil polyethylene sheeting, thereby limiting the possitivity of liekting or spillage over the road. Prosen manifests will be complete by CVI and signed by your representative prior to make dump in terms leaving the site.

PLAY DE ACTION

CVI will utilize a forshift with programment to bulk the drums into doub trailers. We estimate the 100 persons trailers has estimate the 100 persons trailers locks based on 195 drums. Any free liquid water will be splighted using drum-dri or an equivalent solidification material. The drill cuttings will be shipped in bulk to the recycling facility. All empty drums will be left on site 10 requested. Oil can remove the empty drums at additional cost.

PRICING

I. Analytical Requirements:

Sampling Fee	\$ 100 00
TCLP Metals	225.00
T.P.H.	55.00
P.C.B.	105.00
Ignitability	25.00
Reactivity	75.00
B.T.E.X.	95.00

TOTAL ANALYTICAL COSTS. 5 750 00

II. Loading, Transportation & Disposal:

\$69.00/Ton x	ESTIMATED:	50	Ton s	\$3,450.00
Loading Fee				2,650.00

TOTAL ESTEMATED PROJECT OCS".... 1.\$5,880 00

Transportation will be performed by fully lider. In itsured hazardous waste transport vahicles. Transportable volume performed in compliance with DOT resulations Office Times 100-177 concerning aroset labeling and procenting, and with a regulations Office. Part PAC concerning original manifests.

The prices listed the firm for 30 days. It should be emphasized that this is an actual cost. Actual work on the

project will be involced on a unit price seems. All billing will be on a net 30 day basis unless specified. In consiste personnel will complete a daily worksheet anton and supply specific quantities and units of marpower, equipments materials and supplies, freight and disposed on a per day source. This worksheet is verified by Clear Janture's inverte personnel and substract to you for verification. India will provide you with a daily record of the progress of your project. From the issly worksheets a fill and accurate oilling is prepared. You are illust specifically for those services and quantities you receive.

It should also be emphasized that this autimate compains hi provisions for federal, state or local makes, if applicable.

Payment will be Net 30 days after precentation of involces pending credit approvals, and Ductomen appear to bay such investors in full when due, whether or not fusioner has been paid by any insurance carrier or other party against whose it may have a . 1 Clean Venture, incompaerves the right of review your green's status and change terms at any time during the course of this project. Interest will accoun or all amounts unpaid ofter the expiration of thirty days from the invoice due date at the rare of 1.5% month, which is an annual denominate rate of 13%, profit paid and Customen agrees to pay interest and all expenses of collection. Including a reasonable attorney's fee in an amount of 20% of our billing.

Clear Venture, Inc. appreciates the opportunity to prese t this proposal wa structed y look forward to performing this project. Should you require any forther information or task any questions, please do not hesitate to call.

very trally yours,

- Wholest

(LEAN VENTURE, INC.

Merk P. Dougherby CSMM Branch Manager

MD:bo

ACCEPTANCE OF PROPOSAL:

The above process significations and conditions are satisfactory and age hereby objected. You are Authorized to do the work as specified Payment will be more as cuttined above.

DATE	0	ACCEPTANCE	AN AND SECURITY OF THE PROPERTY OF THE PROPERT
SIGNA	ATUR	RE:	

Soil nemerator

NASSAU COUNTY FIREMAN'S TRAINING CENTER SUBCONTRACTOR COST ESTIMATES

May 1992

MALCOLM PIRNIE, INC. ONE INTERNATIONAL BOULEVARD MAHWAH, NEW JERSEY 07495-0018 Malcolm Pirnie requested cost quotes from five contractors to provide disposal services for drill spoils. The drill spoils are from subsurface investigations conducted to determine the extent of soil and ground water contamination resulting from contaminant releases on the Nassau County Fireman's Training Center site. The cost quotes are listed in Appendix A. Chemical concentrations detected in these soils, from analyses of samples collected prior to and during the Remedial Investigation (RI), are tabulated in Appendix B.

The Scope of Work outlines the services to be provided by the selected contractor:

- Transferring drill spoils from 195 55-gallon drums into three lined and
 covered 20 cubic yard roll-off containers. The emptied drums will be
 removed from the site by the contractor.
- Classifying the material in each container for RCRA hazardous waste characteristics (TCLP, corrosivity, reactivity, and ignitability).
- Transporting and disposing of drill spoils in accordance with the RCRA waste code classification.

Soil Disposal Methods

Selection of the disposal destination for the drill spoils is dependent upon the RCRA classification and local, state, and Federal regulations. Malcolm Pirnie required each contractor to include four disposal alternatives in their proposal:

- Recycling
- Direct Incineration
- Direct Landfill
- Stabilization/Landfill

The contractor will be solely responsible for selecting the disposal alternative and the means of transportation to be used. Letters requesting cost quotes were sent to five contractors (Appendix B).

195 x 55 gallons = 60 a yd 3 1/4 drims

60 \$6720 A copy of the draft contract was also sent to each contractor (Appendix C). The five contractors are:

- S & W Waste, Inc. *
- ENSI, Inc.
- International Technology Corporation *
- Stout Environmental, Inc.
- Clean Venture/Cycle Chem.

* Declined to quote

The contractors each received the same Request for Quotation (RFQ) to assure that all quotes are based on the same work items. The cost quotes are tabulated to provide the cost for each subcontractor to complete the work. The contractor selected for the project is Stout Environmental, Inc., who submitted the lowest quote for the work. Table 1 contains the cost break down for Stout Environmental, Inc., Ensi, Inc and Clean Venture, Inc. S&W Waste, Inc. and International Technology Corporation declined to submit quotes.

TABLE 1

NASSAU COUNTY FIREMAN'S TRAINING CENTER RI/FS SUBCONTRACTOR COST ESTIMATES

TRANSFER, CLASSIFICATION AND REMOVAL OF CONTAMINATED DRILLING SPOILS

	STOUT* ENVIRONMENTAL	ENSI, INC.	CLEAN VENTURE		
Mobilization/Demobilization	\$ 100.00	\$ 500.00	\$ 2,100.00		
Transfer soil to containers	\$ 2,925.00	\$ 4,095.00	\$ 2,203.50		
Empty Drum Removal	\$ 1,560.00	\$ 2,340.00	\$ 3,000.00		
Soil Classification (4 samples)	\$ 3,580.00	\$ 4,956.00	\$ 6,160.00		
TOTALS	\$ 8,165.00	\$11,891.00	\$ 13,463.50		
RECYCLING					
Dump Trailer	\$ 1,680.00	\$ 1,995.00	\$ 1,575.00		
Roll-Off Container	\$ 1,980.00	\$ 2,340.00	\$ 1,350.00		
	DIRECT LANDFI	LL			
Dump Trailer	\$ 2,940.00	\$ 5,355.00	\$ 2,940.00		
Roll-Off Container	\$ 2,970.00	\$ 5,580.00	\$ 2,520.00		
	STABILIZATION/LAN	IDFILL			
Dump Trailer	\$ 6,825.00	\$13,642.00	\$ 4,620.00		
Roll-Off Container	\$ 6,570.00	\$12,708.00	\$ 3,960.00		
	DIRECT INCINERA	TION			
Dump Trailer	\$19,110.00	\$18,900.00	\$ 65,100.00		
Roll-Off Container	\$17,640.00	\$17,748.00	\$ 55,800.00		

Dump Trailer is a 21 Ton/Load Roll-Off container is an 18 Ton/Load

* Recommended subcontractor

IT Corporation declined to bid S&W Waste, Inc. declined to bid

APPENDIX A SUBCONTRACTOR COST QUOTES



Mr. Scott Green Malcolm Pirnie, Inc. One International Blvd. Mahwah, NJ 07495-0018

April 2, 1992

Dear Scott:

Clean Venture, Inc. is pleased to submit this proposal for bulking of soil, analysis, transportation and disposal of 195 drums of drill spoils at your facility in Old Bethpage, New York.

Clean Venture, Inc. (CVI) is a chemical, oil and industrial waste management firm with experience in all aspects of environmental contracting, including site investigations, sampling, analyses, site remediation, transportation and disposal. CVI has the technical expertise, equipment, manpower and facilities required to successfully meet your project needs.

All CVI employees working on this project have a minimum of 40 hours training, as mandated by the Occupational Safety and Health Administration (OSHA) 40 CFR 1910.120. In addition, personnel are monitored annually in CVI's medical surveillance program.

CVI will supply all personnel, materials, equipment and documentation required to complete this turnkey project.

CVI is aware of and adheres to all federal, state and local laws and ordinances. CVI and Cycle Chem, Inc. form and environmental service group and disposal facility capable of solving and eliminating most situations involving chemical and hazardous wastes.

Pricing is based on the bid spec. faxed to me on April 2, 1992 and is listed on the attached cost quote bid form. (Same as letter Greate Form)

Disposal will be performed by Cycle Chem, Inc. in Elizabeth, New Jersey. Cycle Chem is a fully permitted treatment, storage and disposal facility (TSDF). Cycle Chem is an approved disposal facility by the NJDEP (EPA ID # NJD002200046).

Prior to loading the dump trailers, an inert sorbent will be placed at the tail gate and trailer will be lined with 6 mil polyethylene sheeting, thereby limiting the possibility of leakage or spillage over the road. Proper manifests will be completed by CVI and signed by your

representative prior to each dump leaving the site.

Transportation will be performed by fully licensed and insured hazardous waste transport vehicles. Transportation will be performed in compliance with DOT regulations CFR49 Parts 100-177 concerning proper labeling and placarding, and with EPA regulations 40 CFR Part 262 concerning shipping manifests.

The prices listed are firm for 30 days. It should be emphasized that this is an estimated cost. Actual work on the project will be invoiced on a unit price basis. All billing will be on a net 30 day basis unless specified. Our on-site personnel will complete a daily work sheet which will supply specific quantities and units of manpower, equipment, materials and supplies, freight and disposal on a per day basis. This work sheet is verified by Clean Venture's on-site personnel and submitted to you for verification. This will provide you with a daily record of the progress of your project. From the daily work sheets a fair and accurate billing is prepared. You are billed specifically for those services and quantities you receive.

It should also be emphasized that this estimate contains no provisions for federal, state or local taxes, if applicable.

Payment terms will be Net 30 days after presentation of invoices, pending credit approvals, and Customer agrees to pay such invoices in full when due, whether or not Customer has been paid by any insurance carrier or other party against whom it may have a claim. Clean Venture, Inc. reserves the right to review your credit status and change terms at any time during the course of this project. Interest will accrue on all amounts unpaid after the expiration of thirty days from he invoice due date at the rate of 1.5% month, which is an annual percentage rate of 18%, until paid and Customer agrees to pay interest and all expenses of collection, including a reasonable attorney's fee in an amount of 20% of our billing.

Clean Venture, Inc. appreciates the opportunity to present this proposal. We sincerely look forward to performing this project. Should you require any further information or have any questions, please do not hesitate to call.

Very truly yours,

Mark P. Dougherty, CHMM

Make P. Confeet

Branch Manager

Enc.

Acceptance of Proposal - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do this work as specified. Payment will be made as outlined above.

Signature:	
Printed Name:	
Company:	

MALCOLM PIRNIE Mr. Mark P. Dougherty, CHMM Clean Venture/Cycle Chem

February 21, 1992 Page 3

COST QUOTE BID FORM				
CATEGORY	UNITS	UNIT COST	COST	
Mobilization/demobilization		Lump sum	2,100.00	
Transfer soil to containers		per/drum cost	11.30_	
TCLP		per/sample	1,000.00	
Reactivity		per/sample	80.00	
Corrosivity		per/sample	15.00	
Ignitability		per/sample	40.00	
1) RECYCLING				
A. Dump Trailer		21 ton/load	1,535.00	
B. Roll-off Container		18 ton/load	1,350.00	
2) Direct Landfill				
A. Dump Trailer		21 ton/load	2,940.00	
B. Roll-off Container		18 ton/load	2,520.00	
3) Direct Incineration				
A. Dump Trailer		21 ton/load	4,620.00	
B. Roll-off Container		18 ton/load	3,960.00	
4) Direct Incineration				
A. Dump Trailer		21 ton/load	65,100.00	
B. Roll-off Container		18 ton/load	55,800.00	
5) Other Thermal Treatment				
TOTAL				

A. Dump Trailer	21Ton/Load	28,350.00
B. Roll-off Co	18Ton/Load	24,300.00
6) Empty drum disposal	195 Drums	3,000.00

Based on our analysis of the testing already performed the soil can go direct to landfill (Option 2). A rental fee will be charged for each roll-off:



Stout Environmental, Inc.

115 ROME STREET • FARMINGDALE, NY 11735 (516) 249-4384 • FAX: (516) 249-0724

March 10, 1992

Mr. Tom Pisciotta
MALCOLM PIRNIE, INC.
One International Boulevard
Mahwah, NJ 07495-4700

Dear Mr. Pisciotta:

On behalf of Stout Environmental, Inc./Enroserv of L.I., Inc., we are pleased to provide you with this proposal to remove drilling spoils at Nassau County Fireman's Training Center in Old Bethpage, New York.

Our many years in the industry will certainly provide you with an efficient, professional job conducted in full compliance with all applicable state and federal regulations. Our sister company, Chemical Management, Inc. (CMI) is willing, able and capable of handling your waste. If awarded this project, we can schedule this job upon receipt of your purchasing authorization and notice to proceed.

Stout Environmental, Inc. and its subsidiaries have extensive experience in all phases of environmental remediation. Our diverse experience ranges from multi-million dollar US EPA Superfund site remediation to sampling projects costing several hundred dollars. Regardless of the size of the project, we provide personnel who are trained professionals and can provide solutions that are cost effective as well as environmentally sound.

Stout Environmental, Inc. is committed to providing quality service to our customers, and is pleased Malcolm Pirnie has considered us for this project. If you have any questions or require additional information, please do not hesitate to contact Keith Bullock at 516-249-4384.

Sincerely

James K. Sherrier

Technical Sales Representative

kb

Enclosure

MALCOLM PIRNIE, INC. Page Two March 31, 1992

SCOPE OF WORK

- 1. Transferring soil from 195 55-gallon drums into three lined and covered 20 cubic yard roll-off containers.
- Classifying soil in each container for TCLP, corrosivity, reactivity, and ignitability. In addition, the subcontractor should include in its proposal, the cost for any additional laboratory tests required by the subcontractor's disposal facility.
- 3. Transporting and disposing of drill spoils in accordance with RCRA waste code classification.
- 4. Disposal of 195 empty drums. The following rates apply:

If the drums can be reconditioned, we will forward a credit of \$2.00/drum.

If drums cannot be reconditioned, they will be disposed of at a cost of \$8.00/drum.

ACKNOWLEDGE	EMENT:
Authorized	Signature
Title	
Date	



	COST QUOTE BI	D FORM	
CATEGORY	UNITS	UNIT COST	COST
Mobilization/demobilization	100	Lump sum	\$ 100.00
Transfer soil to containers	195	\$ 15.00 per/drum cost	\$2,925.00
TCLP	4	\$850.00 per/sample	\$3,400.00
Reactivity	4	\$ 10.00 per/sample	\$ 40.00
Corrosivity	4 .	\$ 10.00 per/sample	\$ 40.00
Ignitability	4	\$ 25.00 per/sample	\$ 100.00
1) RECYCLING	CLEAN EARTH		
A. Dump Trailer	80.00/ton	\$ 80.00@ 21 ton/load	\$1.680.00
B. Roll-off Container	110.00/ton	\$110.00@ 18 ton/load	\$1,980.00
2) Direct Landfill	BFI		
A. Dump Trailer	140.00/ton	\$140.00@ 21 ton/load	\$2,940.00
B. Roll-off Container	165.00/ton	\$165.00@ 18 ton/load	\$2,970.00
3) Stabilization/Landfill	MICHIGAN DISPOSA		
A. Dump Trailer	325.00/ton	\$325.00@ 21 ton/load	\$6,825.00
B. Roll-off Container	365.00/ton	\$365.00@ 18 ton/load	\$6,570.00
4) Direct Incineration	MSP		
A. Dump Trailer	910.00/ton	\$910.00@ 21 ton/load	\$19,110.00
B. Roll-off Container	980.00/ton	\$980.00@ 18 ton/load	\$17,640.00
5) Other			



194 Avenue L Newark, New Jersey 07105 Telephone: (201) 589-0900

MPI032KD.DRM-P1

March 18, 1992

Mr. Thomas R. Pisciotta
Associate
MALCOLM PIRNIE, INC.
One International Boulevard
Mahwah, NJ 07495-0018

RE: NCFTC Drill Spoil Classification and Disposal

Dear Mr. Pisciotta;

ENSI, Inc. is pleased to submit the enclosed proposal for the classification and disposal of drill spoils at the Nassau County Fireman's Training Center, Old Bethpage, NY.

The Subcontract Agreement for Technical Services presents terms and conditions that are acceptable to ENSI.

ENSI at this time does not anticipate subcontracting the on-site work. The final disposal destination is directly dependent upon the waste classification chosen by the generator. Therefore ENSI may utilize one or more of the following permitted disposal facilities.

Recycling: Riverside Brick

Richmond, VA

Direct Landfill: Wayne Disposal, Inc.

Belleville, MI

Stabilization/Landfill: Michigan Disposal, Inc.

Belleville, MI

Incineration: Marine Shale Processors

St. Rose, LA

ENSI, Inc. will also furnish a Certificate of Insurance naming Malcolm Pirnie and the client additionally insured if and when the contract is awarded.

If you require additional information please do not hesitate to call me at 201-589-0900.

Sincerely;

Kauxulmaxda Karen D'Amanda

Rémedial Projects Manager

cc: Fred Virrazzi - Vice President of Sales

BNSI, INC.

	COST QUOTE	BID FORM	
CATEGORY	UNITS	UNIT COST	COST
Mobilization/demobilization	(1)	Lump sum	\$500.00
Transfer soil to containers	195	\$21 per/drum cost	4095.00
TCLP	(1)	\$1,100.0per/sample	1100.00
Reactivity	(1)	\$65.00 per/sample	65.00
Corrosivity	(1)	\$35.00 per/sample	35.00
Ignitability	(1)	\$39.00 per/sample	39.00
1) RECYCLING			
A. Dump Trailer	(1)	\$95/TON 21 ton/load	1,995.00
B. Roll-off Container	(1)	\$130/TON8 ton/load	2,340.00
2) Direct Landfill			
A. Dump Trailer	(1)	\$255/TON21 ton/load	5,355.00
B. Roll-off Container	(1)	\$310/TOM8 ton/load	5,580.00
3) Stabilization/Landfill			
A. Dump Trailer	(1)	\$652/TOB1 ton/load	13,692.00
B. Roll-off Container	(1)	\$705/TOMs ton/load	12,708.00
4) Direct Incineration			
A. Dump Trailer	(1)	\$900/TOWI ton/load	18,900.00
B. Roll-off Container	(1)	\$986/TO N8 ton/load	17,748.00
5) Other			

[#] If the client chooses roll-offs, the following additional charges would apply:

SPOT CHARGE

\$350/roll-off container

LINER

\$ 45/roll-off container

RENTAL

\$60/week/ roll-off container

If the client chooses dump trailers, the following loading charges would apply:

Front End Loader/Operator

\$1000/Day

MOB/DEMOB

\$ 150/Each Way

Loading, Labor, Transportation and Disposal of Empty 55 gallon drums

(195)

\$12.00/drum \$2,340.00



March 6, 1992

Malcolm Pirnie, Inc.
One International Boulevard
Mahwah, New Jersey 07495-0018
Attn: Mr. Thomas R. Pisciotta

Re: Response to Request for Proposal

NCFTC Drill Spoil Classification and Disposal

Old Bethpage, New York

Dear Tom:

It is much regret that I must inform you that IT will be unable to submit a proposal for the above-referenced project.

Although IT has the expertise, equipment and experience to execute the required scope of work, prior commitments of our resources will not allow us to participate in this project.

We certainly appreciate the opportunity to review your bid information which was very organized and informative. Please keep us on your list of contractors to perform Soil Remediation, UST Removals, Building Decontaminations and similar remediation projects. We hope to have the opportunity to work with you again in the future.

In the interim, we at IT wish you good luck in this project.

Sincerely,

TCORPORATION

John P. Quail

Engineer/Account Manager

JPQ/ts



File:

TELEPHONE CALL CONFIRMATION

Local (201) 344-4004 Long Distance	Date
To/From S & W Waste/ Malcolm Pirnie	Time
	_Project <u>0726-</u>
MPI Name Scott Green, Hydrogeologist	_Proj. No
Subject: NCFTC Drill Spoil Classification & Disposal	
Bow Iwaskiw no longer works for the company.	
Doug Smith did not want to bid the job. He felt they were not capa	ble
of doing the job in compliance with the scope of work.	
<u> </u>	
Route to:	

APPENDIX C
DRAFT CONTRACT

SUBCONTRACT AGREEMENT FOR TECHNICAL SERVICES

MALCOLM PIRNIE, INC. Project No.: 0726-53-1

This Agreement is dated as of the by and between MALCOLM PIRNIE, IN White Plains, New York 10602 with an of 07495, and	C., with its principal place of	of business 2 Corporate Park Drive,
SUBCONTRACTOR's Name:		
SUBCONTRACTOR's Address:		

MALCOLM PIRNIE, INC. ("PIRNIE") has entered into a written agreement ("CONTRACT") with County of Nassau, New York ("OWNER") for providing Field Investigations as part of Nassau County Fireman's Training Center Remedial Investigation and Feasibility Study ("PROJECT") as described in the CONTRACT Number S81020C dated February 9, 1989.

PIRNIE and the SUBCONTRACTOR agreed that the SUBCONTRACTOR will perform the following technical work which is part of the CONTRACT identified above. The work covered by this Subcontract Agreement ("SUBCONTRACT") will be performed in accordance with the attached PROVISIONS including any other Attachments and/or Schedules hereto.

SCOPE OF WORK: SUBCONTRACTOR shall provide contaminated drilling spoil (soils) disposal services as: transferring soils to roll-off containers; analyzing soils for appropriate waste classification; transporting soils to disposal facility; and arranging for proper disposal. The scope and detail of the services are more fully described in Exhibit 1, Scope of Basic Services, attached hereto.

COMPENSATION: SUBCONTRACTOR shall be compensated as provided in Exhibit 3, Compensation, attached hereto.

OTHER TERMS AND LISTING OF SUBCONTRACT: SUBCONTRACTOR acknowledges and agrees to the covenants required of SUBCONTRACTOR for analytical laboratory services provided by the SUBCONTRACTOR as provided in Exhibit 2.

SUBCONTRACTOR further acknowledges and agrees that its proposal shall be incorporated by reference into this SUBCONTRACT and is attached hereto as Exhibit 4. However, where this SUBCONTRACT and the SUBCONTRACTOR's proposal conflict, this SUBCONTRACT controls.

SUBCONTRACTOR's work products will be subject to review and approval by the OWNER and PIRNIE.

PROVISIONS

ARTICLE 1. TERMS OF PAYMENT

A. Partial Payment

(1) GENERAL

All estimated quantities of Work for which partial payments have been made are subject to review and correction on the final estimate. Payment by PIRNIE and acceptance by the SUBCONTRACTOR of said partial payments will not constitute acceptance of said quantities.

(2) SCHEDULE OF VALUES

When requested by PIRNIE and at least ten (10) working days prior to submitting the first payment request, the SUBCONTRACTOR will submit a Schedule of Values of the Work, including quantities and unit prices aggregating the SUBCONTRACT Price. The schedule will be satisfactory in form and substance to PIRNIE and will divide the Work into component parts in sufficient detail to serve as the basis for progress payments.

(3) ESTIMATE

Before the twentieth (20th) of each month, the SUBCONTRACTOR will submit to PIRNIE a detailed estimate of the amount earned and request payment. As used here, the words "amount earned" means the value, on the date of the estimate, of the Work completed in accordance with the SUBCONTRACT and the value of approved materials delivered to the project site suitably stored and protected prior to incorporation into the Work. If the SUBCONTRACTOR's estimate of amount earned conforms with PIRNIE's evaluation, PIRNIE will submit a payment request to the OWNER.

(4) PAYMENT

Following receipt of reimbursement from the OWN-ER, payment will be made by PIRNIE to the SUB-CONTRACTOR within fifteen (15) days for the approved invoice amount, less any retainage by the OWNER and any retainage specified elsewhere in this SUBCONTRACT.

B. Final Payments

Upon completion of the Work the SUBCONTRACTOR will notify PIRNIE, in writing, that the Work is complete and that final payment is due. If the Work has been completed to the satisfaction of PIRNIE and all other provisions of this SUB-

CONTRACT fulfilled, PIRNIE will submit to the OWNER a final estimate of the amount due the SUBCONTRACTOR. Final payment will be made within fifteen (15) working days of receipt of said payment from the OWNER.

C. Release of Liens or Claims

The SUBCONTRACTOR will indemnify and hold harmless PIRNIE from all claims for labor and materials furnished under this SUBCONTRACT. Prior to final payment the SUBCONTRACTOR will furnish to PIRNIE, as part of its payment request, a certification that all of the SUBCONTRACTOR's obligations on the project have been satisfied and that all claims and indebtedness have been paid, and verification thereof from its subcontractors and material suppliers. The SUBCONTRACTOR will furnish complete and effective releases or waivers of all liens arising out of or filed in connection with the Work. SUBCONTRACTOR's final payment is not due until all lien releases arising from its Work have been provided to PIRNIE.

D. Interest

Any interest received by PIRNIE from the OWNER for late progress payments or retainages will be shared with the SUB-CONTRACTOR on a pro rata basis.

ARTICLE 2. OBLIGATIONS OF SUBCONTRACTOR

A. Differing Site Conditions

- (1) The SUBCONTRACTOR will promptly, and before such conditions are substantially disturbed, notify PIRNIE in writing of:
 - Subsurface or latent physical conditions at the site differing materially from those indicated in the SUBCONTRACT.
 - Physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work.
 - Actions or inactions, written or oral communication that the SUBCONTRACTOR regards as requiring an amendment to the SUBCONTRACT and/or its terms conditions, payment or schedule of work.
- (2) PIRNIE will promptly investigate the conditions. If the conditions do materially differ and cause an increase or decrease in the SUBCONTRACTOR's cost of, or the time required for, performing any part

- of the Work, PIRNIE will make an equitable adjustment and modify the SUBCONTRACT in writing.
- (3) No claim of the SUBCONTRACTOR under this clause will be allowed unless the SUBCONTRAC-TOR has given the notice required above.

B. Rejected Material

Any material condemned or rejected by PIRNIE or its authorized representative because of nonconformity with the SUB-CONTRACT will be removed at once from the vicinity of the Work by the SUBCONTRACTOR at its own expense, and the same will not be used on the Work.

C. Defects

Any defective workmanship or nonconforming materials or equipment that may be discovered by PIRNIE will be removed and replaced. Failure on the part of PIRNIE to condemn or reject interior workmanship or to note nonconforming materials or equipment will not be construed to imply acceptance of such. It is also understood by the SUBCONTRACTOR that payment by PIRNIE for the Work provided under the SUBCONTRACT will not constitute acceptance. Nothing in this SUBCONTRACT will require PIRNIE to accept any Work prior to acceptance thereof by the OWNER, nor will anything in this section be construed as a waiver of any rights or remedies of PIRNIE for latent defects.

D. Subcontractor as an Independent Agent

The SUBCONTRACTOR will perform all Work under this SUBCONTRACT as an independent agent and will not be considered as an agent of PIRNIE, nor will the SUBCONTRACTOR's lower tier subcontractors or employees be agents of PIRNIE.

E. Lower-Tier Subcontracting

Prior the execution of the SUBCONTRACT, the SUBCONTRACTOR will submit to PIRNIE the names of all lower-tier subcontractors proposed for the work.

SUBCONTRACTOR warrants that it will not subcontract any portion of the services to be performed under this SUBCONTRACT without the prior written consent of PIRNIE, which consent may be withheld at PIRNIE's sole discretion. SUBCONTRACTOR warrants that it will bind all approved, lower-tier subcontractors to the provisions of this SUBCONTRACT, however, neither this SUBCONTRACT, nor any lower-tier subcontracts will create any contractual relationship between any lower-tier subcontractor and PIRNIE or its Project Client(s) nor shall PIRNIE or its Project Client(s) have any liability to any lower-tier subcontractor. The SUBCONTRACTOR shall be solely responsible for the satisfactory performance of services subcontracted by the SUBCONTRACTOR.

F. Insurance and Indemnification

The SUBCONTRACTOR will provide the insurance coverage designated hereinafter for the life of the SUBCONTRACT and will pay all related costs.

Before commencing Work under the SUBCONTRACT, the SUBCONTRACTOR will furnish PIRNIE with certificates of insurance showing the type, amount, class of operations covered, effective dates, and date of expiration of policies, and containing substantially the following statement:

"The insurance covered by this certificate will not be cancelled or materially altered, except after thirty (30) days' written notice has been received by PIRNIE."

The SUBCONTRACTOR will not commence the Work until it has obtained all the insurance required hereunder and has provided certification of same to PIRNIE, nor will the SUBCONTRACTOR allow any lower-tier subcontractor to commence until insurance specified below has been obtained. The required insurance is as follows:

(1) WORKER'S COMPENSATION AND EMPLOY-ER'S INSURANCE

Worker's Compensation Insurance in the statutory amount and Employer's Liability Insurance in an amount not less than \$500,000 for all employees engaged in the Work. In case any such Work is sublet, the SUBCONTRACTOR will require the lower-tier subcontractor similarly to provide the same level of insurance for all of the latter's employees.

(2) COMMERCIAL GENERAL LIABILITY INSUR-ANCE

Commercial general liability insurance providing as a "broad form" basis covering without limitation, operations, completed operations, underground explosion and collapse hazard ("XCU"), contractual agreements and independent contractors with minimum limits of liability of \$1,000,000, general aggregate/\$1,000,000 each occurrence.

AUTOMOBILE LIABILITY INSURANCE

Automobile liability insurance covering any automobile including without limitation, hired and non-owned automobile with minimum limits of liability of \$1,000,000 combined single limit.

All commercial and automobile insurance coverage, including that provided the SUBCONTRACTOR and any lower-tier subcontractors, will name PIRNIE and OWNER as an additional insured and will be the primary coverage to PIRNIE.

In the event any Work is performed by a lower-tier subcontractor, the SUBCONTRACTOR shall be responsible for any liability directly or indirectly arising out of the Work performed, which liability is not covered by the lower-tier subcontractor's insurance.

(3) SUBROGATION

SUBCONTRACTOR will provide for a waiver of subrogation as to all SUBCONTRACTOR carried insurance, in favor of PIRNIE, its officers, employees, agents, and subcontractors, and will require similar waivers from SUBCONTRACTOR's other subcontractors and their lower-tier subcontractors. SUBCONTRACTOR will provide PIRNIE copies of such waivers.

(4) INDEMNITY

The SUBCONTRACTOR will defend, indemnify and hold harmless PIRNIE, OWNER and their agents and employees from and against any and all claims, damages, losses, and expenses including court costs and attorney's fees arising out of or resulting from the performance of the Work, including any act or omission of the SUBCONTRACTOR, any lowertier subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. The foregoing will not apply in the event that the claim, damages, losses, or expenses are caused by the sole negligence of PIR-NIE, but will apply to losses caused by the concurrent fault or negligence of PIRNIE and SUBCON-This indemnity obligation will be TRACTOR. enforced to the maximum extent permissible by law. For any such claims, the indemnification obligation will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the SUBCONTRACTOR or any lower-tier subcontractor under Worker's Compensation Acts, Disability Benefit Acts, or other Employee Benefit Acts.

G. Liens

SUBCONTRACTOR will promptly pay for all services, labor, materials, and equipment used or employed in the Work and will maintain the materials, equipment, structures, buildings, premises, and other subject matter hereof, free and clear of mechanic's or other liens.

H. Codes, Laws and Regulations

SUBCONTRACTOR will comply with all applicable codes, laws, regulations, standards, and ordinances in force during the term of this SUBCONTRACT. Where provisions of the pertinent codes, laws regulations, standards and ordinances conflict with any part of this SUBCONTRACT the more stringent provision shall govern.

I. Permits, Licenses, and Fees

SUBCONTRACTOR will obtain and pay for all permits and licenses required by law that are associated with the Work and will give all necessary notices.

J. Safety

The SUBCONTRACTOR will be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees) and property during performance of the Work. This requirement will apply continuously and not be limited to normal working hours. Safety provisions will conform to U.S. Department of Labor Occupational Safety and Health Act, any equivalent state law, and all other applicable federal, state, county and local laws, ordinances, codes, and any regulations that may be detailed in other parts of this SUBCONTRACT. Where any of these are in conflict, the more stringent requirement will be followed. The SUBCONTRACTOR's failure to thoroughly familiarize itself with the aforementioned safety provisions will not relieve it from compliance with the obligations and penalties set forth herein.

K. Protection of Work and Property

The SUBCONTRACTOR will at all times safely guard and protect from damage the Work and adjacent property. All loss or damages arising out of the nature of the Work to be done under this SUBCONTRACT, or from any unforeseen obstruction or defects which may be encountered in the prosecution of the Work or from the action of the elements, will be the responsibility of the SUBCONTRACTOR.

L. Responsibility of SUBCONTRACTOR to Act in Emergency

In case of any emergency which threatens release of toxic or hazardous material, loss or injury of property, and/or safety of life, the SUBCONTRACTOR will act, without previous instruction from PIRNIE as the situation warrants. The SUBCONTRACTOR will notify PIRNIE immediately thereafter. The SUBCONTRACTOR will submit the name, address, and phone number of a responsible individual or individuals who will be available on a 24-hour basis to handle emergency problems in connection with the Work.

M. Equipment, Materials and Appliances

Unless otherwise stipulated, the SUBCONTRACTOR will provide and pay for all materials, labor, water, tools, equipment, heat, light power, transportation, telephone, temporary facilities, and other facilities, and incidentals necessary for the execution and completion of the Work. Unless otherwise specified, all materials will be new, and both workmanship and materials will be of good quality.

In selecting, and/or approving equipment for installation in the project, the OWNER and PIRNIE assume no responsibility for injury or claims resulting from failure of the equipment to comply with applicable national, state, and local safety codes or requirements, or the safety requirements of a recognized agency, or failure due to faulty design concepts, or defective workmanship and materials.

N. Schedules and Progress Reports

Within ten (10) working days following award of the SUB-CONTRACT and prior to the start of the Work, the SUB-CONTRACTOR will prepare and submit to PIRNIE, a progress schedule identifying the completion of the Work outlined in this SUBCONTRACT, within the deadlines established.

During the progress of the Work, the SUBCONTRACTOR will maintain material deliveries and employ sufficient workers and equipment to accomplish the Work in conformance with the submitted schedule.

The SUBCONTRACTOR will forward to PIRNIE on the twentieth (20th) day of each month, a summary report of the progress of the various parts of the Work, stating the existing status, rate of progress, estimated time of completion, and cause of delay, if any.

O. Use of Premises

The SUBCONTRACTOR will confine its equipment, the storage of materials, and the operation of its workers to limits shown on the Drawings or indicated by law, ordinances, permits, or directions of PIRNIE and will not unreasonably encumber the premises with its materials.

P. Hazardous or Toxic Substances

If this SUBCONTRACT involves hazardous or toxic substances, the following apply:

- (1) SUBCONTRACTOR will be indemnified for losses, damages, personal injuries or death claims only to the extent that PIRNIE is reimbursed for such indemnification by the OWNER.
- (2) SUBCONTRACTOR will strictly comply with all safety or training requirements that are appended to

this SUBCONTRACT, but PIRNIE is not responsible for SUBCONTRACTOR's employees.

Q. Equal Opportunity

To the extent applicable hereto, SUBCONTRACTOR will in the performance of this SUBCONTRACT comply with: The Fair Labor Standards Act of 1939 (29 U.S.C. 201-219); The Walsh-Healey Public Contracts Act (41 U.S.C. 35-45); The Contract Work Hours Standards Act-Overtime Compensation (40 U.S.C. 327-330); Laws restraining the Use of Convict Labor; Utilization of Small Business and Small Disadvantaged Business Concerns (Public Law 95-507); all other federal, state, and local laws; and all regulations and orders issued under any applicable law;

- (1) The Equal Employment Opportunity clause in Section 202 of Executive Order (E.O.) 11246, as amended, and the implementing rules and regulations (41 CFR Part 60) are incorporated herein by reference, unless this order is exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of E.O. 11246 or provisions of any superseding E.O. 11246. As used in said clause, "Contractor" means SUBCONTRACTOR.
- (2) The Affirmative Action for Handicapped Worker Clause in Title 41, Code of Federal Regulations, Part 60, Subsection 741.4 and the implementing rules and regulations of the Department of Labor associated therewith are incorporated herein by reference unless this order is under \$2,500.00. As used in said clause, "Contractor" means SUBCONTRACTOR.
- (3) The Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era Clause of Title 41, Code of Federal Regulations, Part 60, Subsection 250.4 and the implementing rules and regulations of the Department of Labor associated therewith are incorporated herein by reference, unless this order is under \$10,000.00. As used in said clause, "Contractor" means SUBCONTRACTOR and "Contract" means this SUBCONTRACT.

R. Publicity

SUBCONTRACTOR will not disclose the nature of its Work on the Project or engage in any other publicity or public media disclosures with respect to this PROJECT without the prior written consent of PIRNIE and the OWNER.

S. Key Personnel

The SUBCONTRACTOR will provide qualified personnel to perform its Work. Within ten (10) working days of execution of this SUBCONTRACT or receipt of a written authorization to proceed, the SUBCONTRACTOR will submit a list of key

personnel including a designated project manager or superintendent, if requested by PIRNIE. The SUBCONTRACTOR will not change or reassign any of the designated key personnel without the written approval of PIRNIE.

T. Copies of Data

One legible copy each of all notes, field notes, drawings, prints, and plans prepared under the terms of this SUB-CONTRACT will be delivered by the SUBCONTRACTOR to PIRNIE upon completion of the Work.

U. Additional Assignments

The SUBCONTRACTOR will not separately solicit or accept any assignment from the OWNER directly related to the PROJECT during the life of the SUBCONTRACT without PIRNIE's written approval.

V. Access to Records

The SUBCONTRACTOR will maintain accounting records, in accordance with generally accepted accounting principles and practices, to substantiate all invoiced amounts. Said records will be available for examination by PIRNIE during SUBCONTRACTOR's normal business hours for a period of 3 years after SUBCONTRACTOR's final invoice to the extent required to verify the costs incurred hereunder.

W. Suspension of Work

The SUBCONTRACTOR will, upon notice from PIRNIE suspend, delay or interrupt all or a part of the Work. In such event, the SUBCONTRACTOR will resume the Work upon written notice from PIRNIE and an appropriate extension of time will be mutually agreed upon and added to the SUBCONTRACTOR's time of performance.

ARTICLE 3. OBLIGATIONS OF PIRNIE

A. Changes

PIRNIE may, by written order, make changes, revisions, additions, deletions (collectively hereinafter called "changes") in the Work.

SUBCONTRACTOR will immediately upon receipt of any potential changes (including actions, inactions, and written or oral communications) that do not conform to the authorized method of directing changes specified herein, notify PIRNIE, of such changes and will request written disposition.

The SUBCONTRACTOR will not proceed with any proposed changes unless notified to proceed in writing by PIRNIE. Until such notification is received, the SUBCONTRACTOR will continue performance of the Work.

Nothing herein will be construed as relieving the SUBCONTRACTOR of its obligations to perform, including without limitation the failure of the parties to agree upon the SUBCONTRACTOR's entitlement to, or the amount of, any adjustment.

Any claim by the SUBCONTRACTOR for an adjustment under this paragraph must be asserted in writing fully supported by factual information to PIRNIE, within 30 days from the date of receipt by the SUBCONTRACTOR of the written change authorization from PIRNIE or within such extension of that 30-day period as PIRNIE, in its sole discretion, may grant in writing at SUBCONTRACTOR's request prior to expiration of said period.

If the Work is reduced by changes, such action will not constitute a claim for damages based on loss of anticipated profits.

B. Authority of PIRNIE

The authority and responsibility of PIRNIE are limited to the provisions set forth in this SUBCONTRACT. PIRNIE will have the authority to reject Work whenever such rejection may be necessary to ensure execution of the SUBCONTRACT in accordance with the intent.

C. Duties and Responsibilities of PIRNIE

PIRNIE or its representative will be on site during the various stages of the Work to observe the progress and quality of the Work and to determine, in general, if the Work is proceeding in accordance with the intent of the SUBCONTRACT. PIRNIE will not be required to make comprehensive or continuous inspections to check quality or quantity of the Work. Visits and observations made by PIRNIE will not relieve the SUBCONTRACTOR of its obligation to conduct comprehensive inspections of the Work, to furnish materials, to perform acceptable Work, and to provide adequate safety precautions, in conformance with the intent of the SUBCONTRACT.

D. Limitations of PIRNIE's Responsibilities

PIRNIE will not be responsible for the SUBCONTRAC-TOR's means, methods, techniques, sequences or procedures of the Work, or the safety precautions including compliance with the programs incident thereto. PIRNIE will not be responsible for the SUBCONTRACTOR's failure to perform the Work in accordance with this SUBCONTRACT.

PIRNIE will not be responsible for the acts or omissions of the SUBCONTRACTOR, or any lower-tier subcontractors, or any of its or their agents or employees or any other persons at the site or otherwise performing any of the Work. strikes, lockouts, fire, unusual weather conditions, or unavoidable casualties, the SUBCONTRACTOR will, within forty-eight (48) hours of the start of the occurrence, give notice to PIRNIE of the cause of the potential delay and estimate the probable time extension involved. It is agreed that no claim will be made or allowed for any damages which may arise out of any delay caused by the above referenced acts or occurrences, other than claims for the appropriate extension of time.

No extension of time will be granted to the SUBCONTRAC-TOR for delays occurring to parts of the Work that have no measurable impact on the completion of the total Work under the SUBCONTRACT.

No extension of time will be considered for weather conditions normal to the area in which the Work is being performed. Unusual weather conditions, if determined by PIRNIE to be of a severity that would stop all progress of the Work, may be considered as cause for an extension of completion time.

Delays in delivery of equipment or material purchased by the SUBCONTRACTOR or its subcontractors (including PIRNIE-selected equipment) will not be considered as a just cause for delay. The SUBCONTRACTOR will be fully responsible for the timely ordering, scheduling, expediting, delivery and installation of all equipment and materials.

Within fifteen (15) working days after the SUBCONTRAC-TOR submits to PIRNIE a written request for an extension of time, PIRNIE will present its written opinion to the OWNER as to whether an extension of time is justified, and, if so, a recommendation as to the number of days for time extension. Upon the OWNER's approval, PIRNIE will make the final decision on the request for extension of time.

In no event will the SUBCONTRACTOR be entitled to collect or recover any damages, loss, or expense incurred by any delay other than as caused by the OWNER or PIRNIE, as stipulated in Article NOTICE OF CLAIM FOR DELAY.

G. (RESERVED)

H. Waivers

No waiver by either party of any default by the other party in the performance of any provision of the SUBCONTRACT will operate as or be construed as a waiver of any future default whether like or different in character.

I. Amendments In Writing

The SUBCONTRACT and any Attachments and/or Schedules hereto may be amended only by a written agreement, duly executed, between the parties. The SUBCONTRACT may not be changed orally.

J. Governing Law

The parties hereby agree that the SUBCONTRACT, including its validity, interpretation and enforcement, will in all respects be governed by the laws of New York.

K. Survival

SUBCONTRACTOR's indemnity and insurance obligations shall survive termination or conclusion of this SUBCONTRACT.

L. Proprietary Information

All drawings, specifications, technical data, and other information furnished to SUBCONTRACTOR either by PIRNIE or OWNER or developed by SUBCONTRACTOR or others in connection with the Work are, and will remain, the property of PIRNIE or OWNER, and may not be copied or otherwise reproduced or used in any way except in connection with the Work, or disclosed to third parties or used in any manner detrimental to the interests of PIRNIE or OWNER.

The following information will not be subject to the confidentiality requirements of the above:

(1) Information in the public domain through no action of SUBCONTRACTOR in breach of this SUBCONTRACT; or (2) Information independently developed by SUBCONTRACTOR; or (3) Information acquired by SUBCONTRACTOR from a third party not delivered to SUBCONTRACTOR in breach of confidentiality agreements that said third party may have with PIRNIE or OWNER.

M. Force Majeure

Neither party to this SUBCONTRACT will be liable to the other party for delays in performing the Work, or for the direct or indirect cost resulting from such delays, that may result from labor strikes, riots, war, acts of governmental authorities, extraordinary weather conditions or other natural catastrophe, or any other cause beyond the reasonable control or contemplation of either party.

N. Authorization to Proceed

Execution of this SUBCONTRACT by PIRNIE will be authorization for SUBCONTRACTOR to proceed with the Work unless otherwise provided for in this SUBCONTRACT.

O. No Third-Party Beneficiaries

This SUBCONTRACT gives no rights or benefits to anyone other than the SUBCONTRACTOR and PIRNIE, and has no third-party beneficiaries.

E. PIRNIE's Right to do Work

If the SUBCONTRACTOR should, in the opinion of PIRNIE, neglect to prosecute the Work properly or should neglect or refuse at its own cost to take up and replace Work as will have been rejected by PIRNIE, then PIRNIE will without prejudice to any other right which PIRNIE may have under the SUBCONTRACT, take over the portion of the Work which has been improperly executed and make good the deficiencies and deduct the cost thereof from the payments then or thereafter due the SUBCONTRACTOR.

ARTICLE 4. GENERAL LEGAL PROVISIONS

A. Ownership of SUBCONTRACT Documents

All Drawings, Plans, Specifications, and copies thereof furnished by PIRNIE are its property. They are not to be used on other work and, with the exception of the signed set, are to be returned to PIRNIE on request at the completion of the Work. Any reuse of these materials without specific written authorization by PIRNIE will be at the risk of the SUBCONTRACTOR and without liability or legal expense to PIRNIE.

B. Claims for Extra Work

In any case where the SUBCONTRACTOR deems additional compensation will become due, the SUBCONTRACTOR will notify PIRNIE, in writing, of its intention to make claim for such compensation before it begins the Extra Work on which it bases the claim. If such notification is not given or the SUBCONTRACTOR fails to keep strict account of actual cost, then the SUBCONTRACTOR hereby agrees to waive the claim for such additional compensation. Such notice by the SUBCONTRACTOR, and the fact that PIRNIE has kept account of the cost as aforesaid, will not be construed as proving the validity of the claim. Claims for additional compensation will be made in itemized detail and submitted in writing to PIRNIE within ten (10) working days following completion of that portion of the Extra Work for which the SUBCONTRACTOR bases its claim. In case the claim is found by PIRNIE to be acceptable, it will be allowed and paid for as provided in the SUBCONTRACT, or will be allowed and paid under a supplemental subcontract.

C. Notice of Claim for Delay

If the SUBCONTRACTOR intends to file a claim for extension of time for a delay, it will file a notice of claim with PIRNIE within seven (7) working days of the beginning of the occurrence causing the delay. The notice of claim will be in duplicate, in writing, and will state the circumstances and the reasons for the claim. No claim for a time extension will be considered unless the provisions of Article DELAYS AND EXTENSION OF TIME are complied with, and a notice of claim has been filed with PIRNIE in writing, as stated above.

D. Assignment

The SUBCONTRACTOR will not further subcontract any of the Work to be performed under the SUBCONTRACT nor assign said SUBCONTRACT, without in each case the prior written consent of PIRNIE, nor will the SUBCONTRACTOR assign any monies due or to become due to it hereunder without the previous written consent of PIRNIE.

E. Termination

(1) TERMINATION FOR CONVENIENCE

All or part of this SUBCONTRACT may be terminated by PIRNIE for its convenience. In such event, the SUBCONTRACTOR will be entitled to compensation for Work competently performed up to the date of termination and reasonable termination expenses as determined in the discretion of PIRNIE. The SUBCONTRACTOR will not be entitled to compensation for profit on Work not performed.

(2) TERMINATION FOR DEFAULT

PIRNIE may, by written notice, terminate the whole or any part of the SUBCONTRACT for default in the event that the SUBCONTRACTOR fails to perform any of the provisions of the SUBCONTRACT, or fails to make progress as to endanger performance of the SUBCONTRACT in accordance with its terms, and in either of these two circumstances, does not cure such failure to PIRNIE's reasonable satisfaction within a period of ten (10) working days after receipt of notice from PIRNIE specifying such failure.

If, after notice of termination, it is determined for any reason that the SUBCONTRACTOR was not in default or that the default was excusable, the rights and obligations of the parties will be the same as if the notice of termination had been issued pursuant to "TERMINATION FOR CONVENIENCE".

In the event of termination for default, the SUB-CONTRACTOR will not be entitled to termination expenses.

The rights and remedies of PIRNIE provided in Article TERMINATION will not be exclusive and are in addition to any other rights and remedies provided by law or equity or under the SUBCONTRACT.

F. Delays and Extension of Time

If the SUBCONTRACTOR is delayed in the progress of the Work by any act or neglect of the OWNER, PIRNIE, or by any separate subcontractor employed by PIRNIE, or by

P. Conflict of Interest

SUBCONTRACTOR warrants that, based on its understanding of the PROJECT, SUBCONTRACTOR and employees does not have, nor shall they acquire any interest, direct or indirect which would constitute a conflict of interest in the performance of the services required under this SUBCONTRACT. A conflict of interest is defined to be any interest which has the affect or appearance of affecting SUBCONTRACTOR's impartial performance of its services.

Q. Precedence

In the event of any conflicts in any applicable SUBCON-TRACT DOCUMENTS, the following precedence will apply;

- (1) SUBCONTRACT
- (2) CONTRACT
- (3) Scope of Work, Exhibit 1
- (4) Exhibits 2 and 3
- (5) Exhibit 4

ARTICLE 5. DEFINITIONS

A. SUBCONTRACT

The SUBCONTRACT consists of this SUBCONTRACT and the following Special Conditions, Scope of Work, PROVISIONS, Contract (if applicable), Specifications, Drawings and any other Attachments and/or Schedules:

Exhibit 1 - Scope of Basic Services

Exhibit 2 - SUBCONTRACTOR's Requirements for Analytical Laboratory Work

Exhibit 3 - Compensation

Exhibit 4 - SUBCONTRACTOR's Proposal

B. Work

The word "Work" will include all material, labor, tools, and all appliances, machinery, and transportation, necessary to perform and complete the Scope of Work, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated and as required by good practice to provide a complete and satisfactory system. As used herein, "provide" will be understood to mean "furnish and install, complete inplace."

The Work covered by this SUBCONTRACT will be performed in accordance with the terms and conditions stated in this SUBCONTRACT, and any attached Special Conditions, Scope of Work, PROVISIONS, Contract (if applicable), Specifications, Drawings and any other Attachments and/or Schedules.

This SUBCONTRACT represents the entire agreement between the parties, supercedes all prior agreements and understandings and may be changed only by written amendment executed by both parties.

Approved for SUBCONTRACTOR	Accepted for MALCOLM PIRNIE, INC.
Ву	Ву
Title	Title
Date	Date

SCOPE OF BASIC SERVICES

SERVICES TO BE PROVIDED BY SUBCONTRACTOR

- 1.1 The basic services to be provided by the SUBCONTRACTOR include:
 - 1.1.1 Transfer soils from approximately 195 55-gallon drums into three 20-cubic yard roll-off containers at the Nassau County Fireman's Training Center facility in Bethpage, New York.
 - 1.1.2 Collect drilling spoils (soils) samples from each container and analyze for TCLP, corrosivity, reactivity, and ignitability.
 - 1.1.3 Determine classification of soils for determining appropriate disposal.
 - 1.1.4 Dispose of soils in accordance with all federal, state and local laws and regulations.

1.2 Submittals:

1.2.1 The CONTRACTOR must submit all documentation to PIRNIE generated during the classification, transportation, and disposal of contaminated drill spoils (e.g., analytical, data manifests, etc.).

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0726-53-1095

SUBCONTRACTOR REQUIREMENTS FOR ANALYTICAL LABORATORY WORK

SUBCONTRACTOR makes the following covenants with respect to all analytical laboratory work performed by SUBCONTRACTOR in accordance with the SUBCONTRACT:

- CERTIFICATION SUBCONTRACTOR warrants that its laboratory is technically qualified and certified by the appropriate authorities in the State of New York for all categories and subcategories of solid and hazardous waste and possesses the equipment, experience and knowledge necessary to qualify it to perform the services required by this SUBCONTRACT in accordance with the most current requirements of the analytical protocols and methods. The SUBCONTRACTOR further warrants that its laboratory is certified and acceptable to the USEPA and State of New York for all analytical analyses being performed under this Agreement. SUBCONTRACTOR will notify PIRNIE immediately if any of the SUBCONTRACTOR's laboratory certification status is terminated, revoked, or suspended by the USEPA or any other Federal or State Agency or jurisdiction.
- 2.2 STANDARD OF PERFORMANCE SUBCONTRACTOR warrants that its analytical laboratory will perform its services in accordance with high professional and workmanlike standards. SUBCONTRACTOR further warrants that analytical laboratory will perform its services in accordance with the methods specified by PIRNIE and will utilize good and accepted practices customary for analytical laboratory services where necessary to supplement the procedures and methods specified in the prescribed analytical methods. SUBCONTRACTOR shall be responsible for the means, methods and techniques of performing analytical services and the technical accuracy and adequacy of reports of analysis and other deliverables to be provided under this SUBCONTRACT.
- SUBCONTRACTOR warrants that its laboratory has standard operating procedures in place for the disposal of hazardous waste samples and the laboratory possesses all required Federal, State and local permits and licenses for the storage and disposal of hazardous waste material. SUBCONTRACTOR warrants that the compensation received from PIRNIE for the analyses performed includes the cost of disposal of all sample material in accordance with all applicable Federal, State and local laws, rules, and regulations.

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COMPENSATION

3.1	It is expressly understood and agreed by both parties that the total cost for the
	services provided by SUBCONTRACTOR shall not exceed the total maximum
	amount of \$

3.2 SUBCONTRACTOR shall be compensated in accordance with the Cost Quote Bid form which is incorporated in and attached to this Exhibit.

	COST QUOTE BID FORM	1		
CATEGORY	NUMBER	UNITS	UNIT COST	COST
Mobilization/demobilization			Lump sum	
Sample collection			per/drum	
Transfer soil to containers			per/sample	
TCLP Analysis			per/sample	
Reactivity Anaylsis			per/sample	
Corrosivity Analysis			per/sample	
Ignitability Analysis			per/sample	
1) Recycling A. Drum B. Dump Trailer C. Roll-off Container			55 gallon 21 ton/load 18 ton/load	
2) Direct Landfill A. Drum B. Dump Trailer C. Roll-off Container			55 gallon 21 ton/load 18 ton/load	
3) Direct Incineration A. Drum B. Dump Trailer C. Roll-off Container			55 gallon 21 ton/load 18 ton/load	
4) Direct Incineration A. Drum B. Dump Trailer C. Roll-off Container			55 gallon 21 ton/load 18 ton/load	
5) Other				
TOTAL				<u></u>

SUBCONTRACTOR'S PROPOSAL

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APPENDIX B REQUEST FOR QUOTE SOLICITATIONS



February 21, 1992

Mr. James Sherrier Stout Environmental, Inc. 115 Rome Street Farmingdale, NJ 11735

Re: NCFTC Drill Spoil Classification and Disposal

Dear Mr. Sherrier:

Malcolm Pirnie has been retained by Nassau County Department of Public Works to classify and remove contaminated drilling spoils at the Nassau County Fireman's Training Center in Old Bethpage, New York. Malcolm Pirnie is requesting cost quotes from five potential subcontractors to provide drill spoil disposal services. The drill spoils are the result of a subsurface investigation conducted to determine the extent of soil and ground water contamination resulting from hydrocarbon release at the site. Chemical concentrations in these soils are summarized in the analytical results found in Appendix A.

The scope of work, below, outlines the work to be rendered by the sub-contractor.

Scope of Work

- 1) Transferring soil from 195 55-gallon drums into three lined and covered 20 cubic yard roll-off containers.
- 2) Classifying soil in each container for TCLP, corrosivity, reactivity, and ignitability. In addition, the subcontractor should include in its proposal, the cost for any additional laboratory tests required by the subcontractor's disposal facility.
- Transporting and disposing of drill spoils in accordance with RCRA waste code classification.

Soil Disposal Methods

Based on results of soil classification, Malcolm Pirnie understands that the final disposal destination for drill spoils is dependent upon the local, state, and federal regulations. Malcolm Pirnie would like the sub-contractor to include four soil disposal methods in their proposal:



- Recycling
- Direct Incineration
- Direct Landfill
- Stabilization/Landfill

Methods described should include cost estimates for bulk disposal. Bulk disposal should include dump trailer and roll-off container load methods. The Cost Quote Bid Form is attached to the contract in Exhibit 3, and should be filled out by the subcontractor and submitted to Malcolm Pirnie with their Proposal. Upon acceptance of the proposal, the selected firm disposing of the waste will sign a written agreement with Malcolm Pirnie. The form of such agreement is enclosed and the Bidder shall indicate its willingness to enter into the attached agreement. Payment to the firm disposing of the waste will not be made until the soil has been successfully disposed of and Malcolm Pirnie has received payment from the Nassau County Department of Public Works. Exceptions, if any, shall be clearly identified by the Bidder who shall submit a marked copy of the Agreement: (1) identify any sections with which it takes exception and (2) proposing specific alternate language. Any sections not identified shall be deemed to be agreed to by the Bidder.

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Mahwah, NJ 07495-0018

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If you have any questions please do not hesitate to call me at (201) 529-4700.

Very truly yours,

MALCOLM PIRNIE, INC.

Thomas R. Pisciotta

Associate

dm-33/0726-53-1 Sherrier.hr

				TABLE 4-7	1.1						
			61	1967/1968 MALCOLM PIRNE SOIL SAMPLE RESULTS	LM PIRNIE RESULTS						
	W.2K GR2RR Sch Sch	W-Z7 4712/88 Sold mg/kg	W-28 6/12/88 Scall wg/kg	W-24 CORRE 6/11/88 Soil ug/kg	Sydin Bos 891179 JUNIOO SC-M	Syde Bos 88/01/9 67-/A	Syda pos 88/01/9 06-AL	W-31 Soil Soil	W-32 6/11/88 Soil	89/E1/9 88/E1/9	W-21D 11/10/87 Soil
Tetrachioroethene							rz				
1,1,2,2-Tetrachloroethane											
Toluene			52				rz				8.4
Chlorobenzene	12										
Ethylbenzene		1000	400		41		1.1		2500		
Styrene		75	42								
Xylenes (Total)		2700	2400		410				12000	2000	
Loporone						1400	1501	066			
Naphthalene		23000		1800			34001	2807			
2-Methylnaphthalene		93000					18000	920		46000	
Acenaphthene		3900									
Fluorene		6500									
Phenanthrene		14000					0069	71.5	2907		
Bis(2-ethylheryl)Phthalate				2803							

SOIL SAMPLES COLLECTED DURING THE RIORGANICS DATA (in ug/l) Compound W-34 W-35 W-36 feet 34-36 feet 35-37 feet Accione 11 3,000 871 873 Foluene 11 3,000 871 873 Syrene 0,01 1,1 1,500 6100 Xylene (total) 0,71 1,1 1,500 6100 Naphthalene 234 47,000 6100 1,000 Diethylphthalate 233 241 9,300 871 Pyrene 401 1301 341 500 431 Buylbenzylphthalate 401 1301 341 500 431 Buylbenzylphthalate 401 1301 341 500 431 Biccylphthalate 401 963 291 590 431 Bibuylphthalate 401 963 291 590 431 Bibuylphthalate 401 963 291 590 431				TABLE 4-8				
We34 W.35 W.36 W.37 36-38 feet 34-38 feet 34-36 feet 34-36 feet 10 11 3,000 11 11 3,000 11 0,91 3,300 11 11 3,000 11 11 3,000 11 11 1,600 11 11 6,700 11 231 241 9,300 11 130 341 5,600 11 241 9,300 1,200 11 341 500 1,200 11 341 500 5,600 11 341 500 1,200 11 341 500 1,200 11 341 500 5,600 11 341 500 5,600 11 341 500 5,600 11 341 500 5,600 11 501 5,600 <td< th=""><th></th><th>los</th><th>IL SAMPLES C ORGAN</th><th>OLLECTED DI</th><th>URING THE RI</th><th></th><th></th><th></th></td<>		los	IL SAMPLES C ORGAN	OLLECTED DI	URING THE RI			
thalene 13 3,000 te 0,73 13 3,000 thalene 0,73 13 1,600 tte 233 1 47,000 tte 233 47,000 47,000 tte 233 243 5,600 thalene 40 130 341 500 thalate 40 130 341 500 thalate 40 130 341 500 halate 40 96J 29J 59O sandine 1.30 1.30 59O	1521 10	W.34 36-38 feet	W-35 34-38 feet	W-36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
1J 1,000 3,000 1,000 0,93 3,300 1,000 1,500 1,600 1,000 6,700 6,700 1,000 47,000 47,000 1,000 24J 5,600 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,2	Acetone			11				
tick 0.9J 3,300 tite 0.7J 1J 1,600 tite 23J 47,000 47,000 tite 23J 47,000 5,600 tite 24J 9,300 5,600 thalate 40J 130J 34J 5,00 thalate 40J 130J 34J 5,00 halate 40J 130J 34J 5,00 cenzidine 13J 44J 5,00 250J	Toluene		11		3,000	87.1		
tableme 0.7J 1J 1,600 tableme 23J P 47,000 tec 23J P 47,000 tec 23J P 47,000 tec 23J P 47,000 tec 24J 9,300 P thalate 40J 130J 34J 500J thalate 40J 96J 29J 550J halate 49J 96J 29J 590J cenzidine 1.3J 1.3J 1.3J 1.3J	Styrene		16'0		3,300			
ithalene 23J 6,700 late 23J 47,000 e 23J 47,000 e 24J 5,600 c 24J 9,300 c 34J 500J hthalate 40J 130J 34J 500J thalate 40J 130J 34J 590J thlate 49J 96J 29J 590J benzidine 1.3J 1.3J 1.3J	Xylene (total)	U.7.1	ſΙ		1,600	610J		23
case 47,000 23J 6 1 23J 5,600 2 24J 9,300 3 34J 500J 40J 130J 34J 500J 40J 130J 34J 500J 6 49J 96J 29J 59U 6 1.30 1.30 1.30 1.30	Naphthalene				001'9			
23J 5,600 1 24J 5,600 1 24J 9,300 1 34J 500J 1 30J 1,200J 1 40J 130J 34J 500J 1 40J 96J 29J 590J 1e 49J 96J 29J 590J 1e 49J 96J 1.3J 1.3J 2idine 1.3J 1.3J 1.3J 1.3J	2-Methylnaphthalene				47,000			
thalate 40J 130J 5,600 thalate 40J 130J 34J 5,600 thalate 40J 130J 34J 500J talate 40J 130J 34J 500J nlate 49J 96J 29J 590J enzidine 1.3J 1.3J 1.3J	Diethylphthalate	233						
thalate 400 24J 9,300 thalate 40J 130J 34J 500J talate 40J 130J 34J 590J nlate 49J 96J 29J 590J enzidine 1.3J 1.3J 1.3J	Fluorene				2,600			
e 40J 130J 34J 500J e 40J 130J 34J 1,200J e 40J 130J 34J 590J ine 49J 96J 29J 590J ine 1.3J 1.3J 1.3J	Phenanthrene			24J	6,300			
e 40J 130J 34J 1,200J e 40J 130J 34J 590J ine 49J 96J 29J 590J ine 1.3J 1.3J 1.3J	Fluoranthene			34J	500J			
e 400 1300 340 5900 S900 S	Pyrene			301	1,200J			
ine 49J 96J 59U 59U ine 1.3J 1.3J	Butylbenzylphthalate	401	1301	34J				
	Di-n-octylphthalate	49J	196	29J	590J	43J		2703
	Di-n-butylphthlate							407
	3,3'-Dichlorobenzidine							2,700
	Heptachlor			1.31				1.21
PCB-1254	PCB-1254			29J				

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			TABLE 4-8 (Continued)				
	SOIL		SAMPLES COLLECTED DURING THE RI METALS DATA	URING THE R	_		
Parameter	W.34 36-38 feet	W-35 34-38 feet	W.36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7.P 153-160 feet
Aluminum	444E*J	*N65L	+N85L	•N865	765N•	403N*	504E*J
Antimony	2.7U	2.7U	2.7U	3.0U	2.9U	2.9U	3.0U
Arsenic	1.7BW	1.8BW	4.9	3.8BS	3.0	1.5BW	2.7
Barium	2.1B	2.6B	2.5B	3.5B	4.5B	1.8B	S.9B
Beryllium	0.21U	0.20U	0.21U	0.23U	0.31B	0.22U	0.23U
Cadmium	0.42U	0.41U	0.41U	0.46U	0.44U	0.44U	0.46U
Calcium	40.8B	52.1U	26.3U	42.6U	41.2U	33.1U	223N
Chromium	5.2	5.3	3.8	3.5U	4.4	4.7	5.7
Cobalt	0.65B	1.5B	2.1B	1.3B	1.1B	0.93B	1.3B
Copper	5.0B	2.9U	6.2	5.4B	4.7B	7.3	5.3B
Iron	2,000	2,690	2,950	2,490	4,270	1,870	3,550
Lead	0.79B	1.3	2.3	1.1	1.1B	1.1	2.1
Magnesium	17.2B	33.5B	24.6B	34.1B	44.9B	25.5B	70.4B
Manganese	9.4*J	31.9*	16.5*	7.5*	26.3*	16.1*	20.9*J
Mercury	0.08U	0.09U	0.11U	0.09U	0.11U	0.12R	0.11U
Nickel	1.3U	1.2U	1.2U	1.4U	1.3U	1.3U	1.4U
Potassium	120B	144B	117B	125U	123B	121B	197B
Selenium	0.21U	0.21UW	0.22UW	0.22UW	0.24U	0.23UW	0.22UW

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			TABLE 4-8 (Continued)				
	IOS		L SAMPLES COLLECTED DURING THE RI METALS DATA	URING THE R	I		
Parameter	W-34 36-38 feet	W.35 34-38 feet	W.36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7.P 153-160 feet
Silver	1.1U	1.0U	1.0U	1.1U	1.1U	1.1U	1.1U
Sodium	140B	118U	95.4	108U	115U	U721	193B
Thallium	0.42U	0.21U	0.22U	0.22U	0.24U	0.23U	0.43U
Vanadium	2.6B	5.5B	4.8B	4.1B	5.3B	2.7B	5.1B
Zinc	3.6B	3.3U	3.3B	3.7U	4.0B	3.5U	3.9B
Cyanide	0.62U	0.58U	0.56U	0.60U	0.63U	0.62U	0.56U

For a discussion on the meaning of the contaminant qualifiers, see Appendix E.

TABLE 4-8 (Continued)

SOIL SAMPLES COLLECTED DURING THE RI TPH DATA

Sample	Total Petroleum Hydrocarbons (mg/kg) (TPH)
W-34 36-38'	29.4
W-35 34-38'	<13.4
W-36 35-36'	37.6
W-37 34-36'	16,800
W-38 35-37'	<6.42
W-40 39-41'	129
B7-P 153-160'	<13.8

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February 21, 1992

Ms. Karen D'Amanda ENSI, Inc. 194 Avenue L Newark, New Jersey 07105-3831

Re: NCFTC Drill Spoil Classification and Disposal

Dear Ms. D'Amanda:

Malcolm Pirnie has been retained by Nassau County Department of Public Works to classify and remove contaminated drilling spoils at the Nassau County Fireman's Training Center in Old Bethpage, New York. Malcolm Pirnie is requesting cost quotes from five potential subcontractors to provide drill spoil disposal services. The drill spoils are the result of a subsurface investigation conducted to determine the extent of soil and ground water contamination resulting from hydrocarbon release at the site. Chemical concentrations in these soils are summarized in the analytical results found in Appendix A.

The scope of work, below, outlines the work to be rendered by the sub-contractor.

Scope of Work

- 1) Transferring soil from 195 55-gallon drums into three lined and covered 20 cubic yard roll-off containers.
- 2) Classifying soil in each container for TCLP, corrosivity, reactivity, and ignitability. In addition, the subcontractor should include in its proposal, the cost for any additional laboratory tests required by the subcontractor's disposal facility.
- 3) Transporting and disposing of drill spoils in accordance with RCRA waste code classification.

Soil Disposal Methods

Based on results of soil classification, Malcolm Pirnie understands that the final disposal destination for drill spoils is dependent upon the local, state, and federal regulations. Malcolm Pirnie would like the sub-contractor to include four soil disposal methods in their proposal:



- Recycling
- Direct Incineration
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Methods described should include cost estimates for bulk disposal. Bulk disposal should include dump trailer and roll-off container load methods. The Cost Quote Bid Form is attached to the contract in Exhibit 3, and should be filled out by the subcontractor and submitted to Malcolm Pirnie with their Proposal. Upon acceptance of the proposal, the selected firm disposing of the waste will sign a written agreement with Malcolm Pirnie. The form of such agreement is enclosed and the Bidder shall indicate its willingness to enter into the attached agreement. Payment to the firm disposing of the waste will not be made until the soil has been successfully disposed of and Malcolm Pirnie has received payment from the Nassau County Department of Public Works. Exceptions, if any, shall be clearly identified by the Bidder who shall submit a marked copy of the Agreement: (1) identify any sections with which it takes exception and (2) proposing specific alternate language. Any sections not identified shall be deemed to be agreed to by the Bidder.

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MALCOLM PIRNIE, INC.

Thomas R. Pisciotta

Associate

dm-33/0726-53-1 Amanda.ltr



	COST QUOTE BI	ID FORM	
CATEGORY	UNITS	UNIT COST	COST
Mobilization/demobilization		Lump sum	
Transfer soil to containers		per/drum cost	
TCLP		per/sample	
Reactivity		per/sample	
Corrosivity		per/sample	
Ignitability		per/sample	
1) RECYCLING			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
2) Direct Landfill			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
3) Direct Incineration			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
4) Direct Incineration			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
5) Other			
TOTAL			

				TABLE 4-7	1.1						
			19	1967/1968 MALCOLM PIRNIE SOIL SAMPLE RESULTS	LM PIRNIE RESULTS						
	#.36 \$12.88 \$0.8 \$0.8	W-27 60.2088 8041 8041	W-28 6/12/88 Soil weft	W-24 COBAP 6/11/88 Soil 18/4	W-25 COMP 6/11/88 Soil 10/16/8	W-29 6/10/68 Sod	Sysa pos sejoly oc:/A	W-31 6/10/88 Soil	W-32 6/11/88 Soil	89/E1/9 80/E1/9	W-ZID 11/10/87 Soli
Tetrachioroethene							12				
1,1,2,2-Tetrachloroethane											
Tolucne			52				rz				8.4
Chlorobenzene	12										
Ethylbenzene		1000	400		41		1.3		2500		
Siyrene		75	42								
Xylencs (Total)		2700	2400		410				12000	2000	
Leoporone						1400	150J	066			
Naphthalene		23000		1800			34001	280J			
2-Methylnaphthalene		93000					18000	920		46000	
Acenaphthene		3900									
Fluorene		9059									
Phenanthrene		14000					0069	71.7	2907		
Bis(2-cthylhczyl)Phthalate				280J							

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			TABLE 4-8				
	SOIL		PLES COLLECTED DURIN ORGANICS DATA (in ug/l)	SAMPLES COLLECTED DURING THE RI ORGANICS DATA (in ug/1)			
Compound	W-34 36-38 feet	W-35 34-38 feet	W-36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7.P 153-160 feet
Acetone			ſΙ				
Toluene		11		3,000	87J		
Styrene		0.9J		3,300			
Xylene (total)	0.73	11		1,600	6100		2J
Naphthalene				6,700			
2-Methylnaphthalene				47,000			
Diethylphthalate	23J						
Fluorene				2,600			
Phenanthrene			24J	6,300			
Fluoranthene			34J	S001			
Pyrene			301	1,200			
Butylbenzylphthalate	401	1301	34J				
Di-n-octylphthalate	49J	D96	29J	S901	43J		2700
Di-n-butylphthlate							401
3,3'-Dichlorobenzidine							2,700
Heptachlor			1.3J				1.23
PCB-1254			29 J				

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			TABLE 4-8 (Continued)				
	SOIL		SAMPLES COLLECTED DURING THE RI METALS DATA	URING THE R	_		
Parameter	W-34 36-38 feet	W-35 34-38 feet	W.36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
Aluminum	444E*J	4N65L	•N85L	•N86S	•NS9L	403N•	504E*J
Antimony	2.7U	2.7U	2.7U	3.0U	2.9U	2.9U	3.0U
Arsenic	1.7BW	1.8BW	4.9	3.8BS	3.0	1.5BW	2.7
Barium	2.1B	2.68	2.5B	3.5B	4.5B	1.8B	5.9B
Beryllium	0.21U	0.20U	0.21U	0.23U	0.31B	0.22U	0.23U
Cadmium	0.42U	0.41U	0.41U	0.46U	0.44U	0.44U	0.46U
Calcium	40.8B	52.1U	DE:9Z	42.6U	41.2U	33.1U	223N
Chromium	5.2	5.3	3.8	3.5U	4.4	4.7	5.7
Cobalt	0.65B	1.5B	2.1B	1.3B	1.1B	0.93B	1.3B
Copper	80.3	7.9U	6.2	5.4B	4.7B	7.3	5.3B
Iron	2,000	069'7	2,950	2,490	4,270	1,870	3,550
Lead	0.79B	1.3	2.3	1.1	1.1B	1.1	2.1
Magnesium	17.2B	33.5B	24.6B	34.1B	44.9B	25.5B	70.4B
Manganese	6.4*J	•6'18	16.5	7.5•	26.3*	16.1	20.9*J
Mercury	0.08U	0.09U	0.11U	0.09U	0.11U	0.12R	0.11U
Nickel	1.3U	1.2U	1.2U	1.4U	1.3U	1.3U	1.4U
Potassium	120B	144B	117B	125U	123B	121B	197B
Selenium	0.21U	0.21UW	0.22UW	0.22UW	0.24U	0.23UW	0.22UW

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			TABLE 4-8 (Continued)				
	IOS		. SAMPLES COLLECTED DURING THE RI METALS DATA	URING THE R			
Parameter	W-34 36-38 feet	W-35 34-38 feet	W.36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
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Sodium	140B	118U	95.4	108U	115U	U27U	193B
Thallium	0.42U	0.21U	0.22U	0.22U	0.24U	0.23U	0.43U
Vanadium	2.68	5.5B	4.8B	4.1B	5.3B	2.7B	5.1B
Zinc	3.6B	3.3U	3.3B	3.7U	4.0B	3.5U	3.9B
Cyanide	0. 6 2U	0.58U	0.56U	0.60U	0.63U	0.62U	0.56U

For a discussion on the meaning of the contaminant qualifiers, see Appendix E.

TABLE 4-8 (Continued)

SOIL SAMPLES COLLECTED DURING THE RITPH DATA

Sample	Total Petroleum Hydrocarbons (mg/kg) (TPH)
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W-40 39-41'	129
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February 21, 1992

Mr. Mark P. Dougherty, CHMM Clean Venture/Cycle Chem 655 Washington Boulevard Stamford, CT 06901

Re: NCFTC Drill Spoil Classification and Disposal

Dear Mr. Dougherty:

Malcolm Pirnie has been retained by Nassau County Department of Public Works to classify and remove contaminated drilling spoils at the Nassau County Fireman's Training Center in Old Bethpage, New York. Malcolm Pirnie is requesting cost quotes from five potential subcontractors to provide drill spoil disposal services. The drill spoils are the result of a subsurface investigation conducted to determine the extent of soil and ground water contamination resulting from hydrocarbon release at the site. Chemical concentrations in these soils are summarized in the analytical results found in Appendix A.

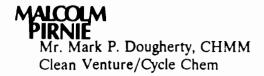
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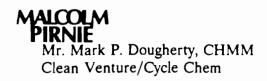
Very truly yours,

MALCOLM PIRNIE, INC.

Thomas R. Pisciotta

Associate

dm-33/0726-53-1 Doughrty.htr



	COST QUOTE B	ID FORM	
CATEGORY	UNITS	UNIT COST	COST
Mobilization/demobilization		Lump sum	
Transfer soil to containers		per/drum cost	
TCLP		per/sample	
Reactivity		per/sample	
Corrosivity		per/sample	
Ignitability		per/sample	
1) RECYCLING			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	_
2) Direct Landfill			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
3) Direct Incineration			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
4) Direct Incineration			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
5) Other			
TOTAL			

2/00 2/00 2/00 150 150 150 1500 1100 1100 1100 111 12901 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 2301 111 </th <th>Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Bithylbenzene Styrene</th> <th>COLUMB 1000 1000 1000 1000 1000 1000 1000 10</th> <th>W-28 6/12/88 6/12/88 8</th> <th>TABLE 4-7 1987/1988 MALCOLM PIRNIE SOIL SAMPLE RESULTS W-24 COMP W-25 COM 6/11/88 Soil 1987/2 Soil 1987/2 Soil</th> <th>LA PIRNIE RESULTS W-25 COMP 6/11/88 Sod 19/6</th> <th>W-29 (4/10/68) Soil weight</th> <th>W.30 6/10/88 Soil 20 21</th> <th>W.31 6/10/68 Soil wyfg</th> <th>W-32 6/11/88 Soil wg/kg</th> <th>80.517.00 Solid So</th> <th>W.ZID 11/1067 Soil w/by</th>	Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Bithylbenzene Styrene	COLUMB 1000 1000 1000 1000 1000 1000 1000 10	W-28 6/12/88 6/12/88 8	TABLE 4-7 1987/1988 MALCOLM PIRNIE SOIL SAMPLE RESULTS W-24 COMP W-25 COM 6/11/88 Soil 1987/2 Soil 1987/2 Soil	LA PIRNIE RESULTS W-25 COMP 6/11/88 Sod 19/6	W-29 (4/10/68) Soil weight	W.30 6/10/88 Soil 20 21	W.31 6/10/68 Soil wyfg	W-32 6/11/88 Soil wg/kg	80.517.00 Solid So	W.ZID 11/1067 Soil w/by
3900 6500 713	Xylenes (Total) laoporone Naphthalene 2-Methylnaphthalene	23000	2400	1800	410	1400	150J 3400J 18000	280.1	OMOZI	46000	
	Acenaphthene Fluorene Phenanthrene	3900 6500 14000					0069	LIT.	7907		

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TABLE	
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			TABLE 4-8				
	SO)	SOIL SAMPLES COLLECTED DURING THE RI ORGANICS DATA (in ug/l)	PLES COLLECTED DURIN ORGANICS DATA (in ug/l)	URING THE RI ug/l)			
Compound	W-34 36-38 feet	W-35 34-38 feet	W-36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
Acetone			ſI				
Toluene		ſΙ		3,000	87.1		
Styrene		0.93		3,300			
Xylene (total)	0.73	1.1		1,600	6100		n n
Naphthalene				902'9			
2-Methylnaphthalene				47,000			
Diethylphthalate	233						
Fluorene				2,600			
Phenanthrene			24J	6,300			
Fluoranthene			34J	S00J			
Pyrene			301	1,200J			
Butylbenzylphthalate	40J	1301	34J				
Di-n-octylphthalate	493	D96	29J	290I	433		270J
Di-n-butylphthlate							401
3,3'-Dichlorobenzidine							2,700
Heptachlor			1.3J				1.23
PCB-1254			29J				

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		-	TABLE 4-8 (Continued)				
	Nos	IL SAMPLES C	SAMPLES COLLECTED DURING THE RI METALS DATA	URING THE R	_		
Parameter	W-34 36-38 feet	W-35 34-38 feet	35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
Aluminum	444E*J	*N65L	758N*	•N86S	765N*	403N*	504E*J
Antimony	2.7U	2.7U	2.7U	3.0U	7:9U	2.9U	3.0U
Arsenic	1.7BW	1.8BW	4.9	3.8BS	3.0	1.5BW	2.7
Barium	2.1B	2.6B	2.5B	3.5B	4.5B	1.8B	5.9B
Beryllium	0.21U	0.20U	0.21U	0.23U	0.31B	0.22U	0.23U
Cadmium	0.42U	0.41U	0.41U	0.46U	0.44U	0.44U	0.46U
Calcium	40.8B	52.1U	26.3U	42.6U	41.2U	33.1U	223N
Chromium	5.2	5.3	3.8	3.5U	4.4	4.7	5.7
Cobalt	0.65B	1.5B	2.1B	1.3B	1.1B	0.93B	1.3B
Copper	5.0B	2.9U	6.2	5.4B	4.7B	7.3	5.3B
Iron	2,000	2,690	2,950	2,490	4,270	1,870	3,550
Lead	0.79B	1.3	2.3	1.1	1.1B	1.1	2.1
Magnesium	17.2B	33.5B	24.6B	34.1B	44.9B	25.5B	70.4B
Manganese	9.4•J	31.9*	16.5*	7.5*	26.3*	16.1*	20.9*J
Mercury	0.08U	0.09U	0.11U	0.09U	0.11U	0.12R	0.11U
Nickel	1.3U	1.2U	1.2U	1.4U	1.3U	1.3U	1.4U
Potassium	120B	144B	117B	125U	123B	121B	197B
Selenium	0.21U	0.21UW	0.22UW	0.22UW	0.24U	0.23UW	0.22UW

			TABLE 4-8 (Continued)				
	SOII		L SAMPLES COLLECTED DURING THE RI METALS DATA	URING THE R			
Parameter	W-34 36-38 feet	W-35 34-38 feet	W.36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7.P 153-160 feet
Silver	1.1U	1.0U	1.0U	1.1U	1.1U	1.1U	1.1U
Sodium	140B	118U	95.4	108U	115U	U721	193B
Thallium	0.42U	0.21U	0.22U	0.22U	0.24U	0.23U	0.43U
Vanadium	2.6B	5.5B	4.8B	4.1B	5.3B	2.7B	5.1B
Zinc	3.6B	3.3U	3.3B	3.7U	4.0B	3.5U	3.9B
Cyanide	0.62U	0.58U	0.56U	0.60U	0.63U	0.62U	0.56U

For a discussion on the meaning of the contaminant qualifiers, see Appendix E.



February 21, 1992

Mr. John P. Quail
International Technology Corporation
7 Cragwood Road
Avenel, New Jersey 07001

Re: NCFTC Drill Spoil Classification and Disposal

Dear Mr. Quail:

Malcolm Pirnie has been retained by Nassau County Department of Public Works to classify and remove contaminated drilling spoils at the Nassau County Fireman's Training Center in Old Bethpage, New York. Malcolm Pirnie is requesting cost quotes from five potential subcontractors to provide drill spoil disposal services. The drill spoils are the result of a subsurface investigation conducted to determine the extent of soil and ground water contamination resulting from hydrocarbon release at the site. Chemical concentrations in these soils are summarized in the analytical results found in Appendix A.

The scope of work, below, outlines the work to be rendered by the sub-contractor.

Scope of Work

- 1) Transferring soil from 195 55-gallon drums into three lined and covered 20 cubic yard roll-off containers.
- 2) Classifying soil in each container for TCLP, corrosivity, reactivity, and ignitability. In addition, the subcontractor should include in its proposal, the cost for any additional laboratory tests required by the subcontractor's disposal facility.
- 3) Transporting and disposing of drill spoils in accordance with RCRA waste code classification.

Soil Disposal Methods

Based on results of soil classification, Malcolm Pirnie understands that the final disposal destination for drill spoils is dependent upon the local, state, and federal regulations. Malcolm Pirnie would like the sub-contractor to include four soil disposal methods in their proposal:

MALCOLM PIRNIE Mr. John P. Quail International Technology Corporation

- Recycling
- Direct Incineration
- Direct Landfill
- Stabilization/Landfill

Methods described should include cost estimates for bulk disposal. Bulk disposal should include dump trailer and roll-off container load methods. The Cost Quote Bid Form is attached to the contract in Exhibit 3, and should be filled out by the subcontractor and submitted to Malcolm Pirnie with their Proposal. Upon acceptance of the proposal, the selected firm disposing of the waste will sign a written agreement with Malcolm Pirnie. The form of such agreement is enclosed and the Bidder shall indicate its willingness to enter into the attached agreement. Payment to the firm disposing of the waste will not be made until the soil has been successfully disposed of and Malcolm Pirnie has received payment from the Nassau County Department of Public Works. Exceptions, if any, shall be clearly identified by the Bidder who shall submit a marked copy of the Agreement: (1) identify any sections with which it takes exception and (2) proposing specific alternate language. Any sections not identified shall be deemed to be agreed to by the Bidder.

Two copies of a proposal addressing and pricing each Scope of Work item shall be received no later than March 11, 1992. All proposals shall be addressed to:

Malcolm Pirnie, Inc. One International Boulevard Mahwah, NJ 07495-0018

Attn: Tom Pisciotta

Malcolm Pirnie reserves the right to reject any and all Bids, to waive any and all informalities, to negotiate with the successful Bidder and the right to disregard all nonconforming, nonresponsive or conditional Bids. "The Bidder shall identify and provide qualifications for all subcontractors anticipated to be used by the Bidder for this project. Use of the identified subcontractors is subject to Malcolm Pirnie's approval".

If you have any questions please do not hesitate to call me at (201) 529-4700.

Very truly yours,

MALCOLM PIRNIE, INC.

Thomas R. Pisciotta

Associate

dm-33/0726-53-1 Quail.ltr



	COST QUOTE BI	D FORM	
CATEGORY	UNITS	UNIT COST	COST
Mobilization/demobilization		Lump sum	
Transfer soil to containers		per/drum cost	
TCLP		per/sample	
Reactivity		per/sample	
Corrosivity		per/sample	
Ignitability		per/sample	
1) RECYCLING			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
2) Direct Landfill			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
3) Direct Incineration			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
4) Direct Incineration			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	_
5) Other			
TOTAL			

Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene	4.36 512.88 5.12.88	W-27 6/12/88 804 804 804	19 W-28 G/12/88 Soil 19 19 19 19 19 19 19 19 19 19 19 19 19	1967/1968 MALCOLM PIRNIE SOIL SAMPLE RESULTS W-24 COMP W-25 COM 6/11/68 Soil 19/6 19/6 19/6 19/6	LM PIRNIE RESULTS W-25 COMP 6/11/88 Soil wg/c	W-29 6/10/88 Soil wg/kg	W-30 6/10/88 Soil wg/kg 2J	W-31 6/10/88 Soil wg/kg	W-32 6/11/88 Soil wg/kg	W.33 6/13/88 Soli E-6/8	W.21D 11/1067 Soil w/Ag
Styrene (Total)		2700	42 2400		410				12000	2000	
Isoporone Naphthalene		23000		1800		1400	150J	990			
2-Methylnaphthalene Acenaphthene		00068					18000	920		46000	
Fluorene Phenanthrene Bis(2-ethylhenyl)Phthalate		14000		2803			0069	71.1	2901		

TABLE 4-8 (Continued)

SOIL SAMPLES COLLECTED DURING THE RITPH DATA

Sample	Total Petroleum Hydrocarbons (mg/kg) (TPH)
W-34 36-38'	29.4
W-35 34-38'	<13.4
W-36 35-36'	37.6
W-37 34-36'	16,800
W-38 35-37'	<6.42
W-40 39-41'	129
B7-P 153-160'	<13.8

			TABLE 4-8 (Continued)				
	SOI	L SAMPLES	COLLECTED DI METALS DATA	URING THE RI			
Parameter	W.34 36-38 feet	W-35 34-38 feet	W-36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
Silver	1.1U	1.0U	1.0U	1.1U	1.1U	1.1U	1.1U
Sodium	140B	118U	95.4	108U	USII	U721	193B
Thallium	0.42U	0.21U	0.22U	0.22U	0.24U	0.23U	0.43U
Vanadium	2.6B	5.5B	4.8B	4.1B	5.3B	2.7B	5.1B
Zinc	3.6B	3.3U	3.3B	3.7U	4.0B	3.5U	3.9B
Cyanide	0.62U	0.58U	0.56U	0.60U	0.63U	0.62U	0.56U

For a discussion on the meaning of the contaminant qualifiers, see Appendix E.

0.22UW

0.23UW

0.24U

0.22UW

0.22UW

0.21UW

0.21U

197B

1.4U

0.11U

20.9*J

70.4B

Magnesium

Iron

Manganese

Mercury

Nickel

2.1

3,550

5.3B

1.3B

		W-40 39-41 feet	403N*	2.9U	1.5BW	1.8B	0.22U	0.44U	33.1U	4.7	0.93B	7.3	1,870	1.1	25.5B	16.1	0.12R	1.3U	121B
	4	W-38 35-37 feet	765N•	2.9U	3.0	4.5B	0.31B	0.44U	41.2U	4.4	1.1B	4.7B	4,270	1.1B	44.9B	26.3*	0.11U	1.3U	123B
	URING THE R	W-37 34-36 feet	•N865	3.0U	3.8BS	3.5B	0.23U	0.46U	42.6U	3.5U	1.3B	5.4B	2,490	1.1	34.1B	7.5*	0.09U	1.4U	125U
TABLE 4-8 (Continued)	COLLECTED DI METALS DATA	W-36 35-36 feet	+N85L	2.7U	4.9	2.5B	0.21U	0.41U	26.3U	3.8	2.1B	6.2	2,950	2.3	24.6B	16.5	0.11U	1.2U	117B
	SOIL SAMPLES COLLECTED DURING THE RI METALS DATA	W-35 34-38 feet	*N65L	2.7U	1.8BW	2.6B	0.20U	0.41U	52.1U	5.3	1.5B	2.9U	2,690	1.3	33.5B	31.9*	0.09U	1.2U	144B
	SO	W-34 36-38 feet	444E*J	2.7U	1.7BW	2.1B	0.21U	0.42U	40.8B	5.2	0.65B	5.0B	2,000	0.79B	17.2B	9.4*J	0.08U	1.3U	120B

Chromium

Cobalt

Copper

Cadmium

Calcium

Beryllium

B7-P 153-160 feet

Parameter

Aluminum

Antimony

Arsenic

Barium

504E*J

3.0U

0.23U

5.9B

2.7

0.46U

223N

5.7

Potassium

Selenium

			TABLE 4-8				
	SOIL	L SAMPLES CORGAN	PLES COLLECTED DURIN ORGANICS DATA (in ug/l)	SAMPLES COLLECTED DURING THE RI ORGANICS DATA (in ug/l)			
Compound	W.34 36-38 feet	W-35 34-38 feet	W-36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
Acetone			ſI				
Toluene		11		3,000	87.1		
Styrene		0.93		3,300			
Xylene (total)	0.73	1.1		1,600	6100		23
Naphthalene				6,700			
2-Methylnaphthalene				47,000			
Diethylphthalate	23J						
Fluorene				2,600			
Phenanthrene			24J	9,300			
Fluoranthene			34J	500J			
Pyrene			301	1,200J			
Butylbenzylphthalate	401	1301	34J				
Di-n-octylphthalate	49J	96J	29J	590J	43J		270J
Di-n-butylphthlate							403
3,3'-Dichlorobenzidine							2,700
Heptachlor			1.3J				1.21
PCB-1254			29J				



February 21, 1992

Bow Iwaskiw S and W Waste, Inc. 115 Jacobus Avenue South Kearny, New Jersey 07032

Re: NCFTC Drill Spoil Classification and Disposal

Dear Mr. Iwaskiw:

Malcolm Pirnie has been retained by Nassau County Department of Public Works to classify and remove contaminated drilling spoils at the Nassau County Fireman's Training Center in Old Bethpage, New York. Malcolm Pirnie is requesting cost quotes from five potential subcontractors to provide drill spoil disposal services. The drill spoils are the result of a subsurface investigation conducted to determine the extent of soil and ground water contamination resulting from hydrocarbon release at the site. Chemical concentrations in these soils are summarized in the analytical results found in Appendix A.

The scope of work, below, outlines the work to be rendered by the sub-contractor.

Scope of Work

- 1) Transferring soil from 195 55-gallon drums into three lined and covered 20 cubic yard roll-off containers.
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- Transporting and disposing of drill spoils in accordance with RCRA waste code classification.

Soil Disposal Methods

Based on results of soil classification, Malcolm Pirnie understands that the final disposal destination for drill spoils is dependent upon the local, state, and federal regulations. Malcolm Pirnie would like the sub-contractor to include four soil disposal methods in their proposal:

PIRNIE

Bow Iwaskiw
S and W Waste, Inc.

- Recycling
- Direct Incineration
- Direct Landfill
- Stabilization/Landfill

Methods described should include cost estimates for bulk disposal. Bulk disposal should include dump trailer and roll-off container load methods. The Cost Quote Bid Form is attached to the contract in Exhibit 3, and should be filled out by the subcontractor and submitted to Malcolm Pirnie with their Proposal. Upon acceptance of the proposal, the selected firm disposing of the waste will sign a written agreement with Malcolm Pirnie. The form of such agreement is enclosed and the Bidder shall indicate its willingness to enter into the attached agreement. Payment to the firm disposing of the waste will not be made until the soil has been successfully disposed of and Malcolm Pirnie has received payment from the Nassau County Department of Public Works. Exceptions, if any, shall be clearly identified by the Bidder who shall submit a marked copy of the Agreement: (1) identify any sections with which it takes exception and (2) proposing specific alternate language. Any sections not identified shall be deemed to be agreed to by the Bidder.

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Attn: Tom Pisciotta

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If you have any questions please do not hesitate to call me at (201) 529-4700.

Very truly yours,

MALÇOLM PIRNJE, INC.

Thomas R. Pisciotta

Associate

dm-33/0726-53-1



	COST QUOTE BI	ID FORM	
CATEGORY	UNITS	UNIT COST	COST
Mobilization/demobilization		Lump sum	
Transfer soil to containers		per/drum cost	
TCLP		per/sample	
Reactivity	_	per/sample	
Corrosivity		per/sample	
Ignitability		per/sample	
1) RECYCLING			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
2) Direct Landfill			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
3) Direct Incineration			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
4) Direct Incineration			
A. Dump Trailer		21 ton/load	
B. Roll-off Container		18 ton/load	
5) Other			
TOTAL			

SOIL. SAMPLIB R SOIL. SAMPLIB R W.28 W-24 COMP 6/12/88 6/11/88 Soil 80/4 400 400 42 2400 1800	W-28 6/12/88 504 504 504 1000 1000 400	PLE RESULTS MP W-25 COMP (A11,08) Soil Mg/c 11	2 N 2.29	W-30 6/10/68 Soli wg/kg	W-31 6/10/88 Soil ug/kg	W-32		
way 26 wy 27 wy 28 wy 24 COlarp (11,28) Solid	W-28 G12.88 Soil		80% Soil	W-30 6/10/68 Soil wg/kg	W-31 6/10/68 Soil soil	W-32		
cetrachloroethane 52 sinzene 12 52 acene 12 40 acene 75 42 (Total) 2700 2400 ee 23000 2400 lene 63000 3900 thene 63000 400 thene 63000 63000 thene 6500 6500	1000	11		2 2		Soil Soil	6/13/88 Soli	Soil
ctracklorocthane 52 caree 12 aene 1000 400 cere 75 42 (Total) 2700 2400 ee 23000 2400 lene 63000 2400 thene 3900 23000 thene 63000 2400	1000	41		77				
S2 S2 S2 S2 S2 S2 S2 S2	1000	11		77				
12 1000 400 1000 400 1000 400 1000	1000 4	14						8.4
1000 400	7 7	14						
(Total) 2700 2400 ne 23000 databathalene 63000 soo 63000 htthene 6500 establishmene 6500	5			L1		2500		
2700 2400 23000 63000 63000 6500								
23000 63000 3900 6500		410				12000	2000	
23000 63000 3900 6500			1400	1501	066			
	23000	800		34007	2807			
	03000			18000	920		46000	
	3900							
	9200							
Phenanthrene 14000	14000			0069	71.5	290.1		
Bis(2-ethylhezyl)Phthalate 2801		1087						

			TABLE 4-8				
	IIOS	L SAMPLES C ORGAN	PLES COLLECTED DURIN ORGANICS DATA (in ug/l)	L SAMPLES COLLECTED DURING THE RI ORGANICS DATA (in ug/l)			
Compound	W34 36-38 feet	W-35 34-38 feet	W-36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7.P 153-160 feet
Acetone			ſΙ				
Toluene		1.1		3,000J	87J		
Styrene		0.9J		3,300			
Xylene (total)	U.7J	11		1,600	610J		23
Naphthalene				6,700			
2-Methylnaphthalene				47,000			
Diethylphthalate	23J						
Fluorene				2,600			
Phenanthrene			24J	6,300			
Fluoranthene			34J	2007			
Pyrene			301	1,200J			
Butylbenzylphthalate	401	130J	34]				
Di-n-octylphthalate	49J	96J	29J	106S	43J		Z70J
Di-n-butylphthlate							407
3,3'-Dichlorobenzidine							2,700
Heptachlor			1.3J				1.23
PCB-1254			29J				

PAR-mi

TABLE 4-8 (Continued)

SOIL SAMPLES COLLECTED DURING THE RI METALS DATA

Parameter	W-34 36-38 feet	W-35 34-38 feet	W-36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
Aluminum	444E*J	759N*	*N85L	\$N865	765N*	403N*	504E*J
Antimony	2.7U	2.7U	2.7U	3.0U	2.9U	2.9U	3.0U
Arsenic	1.7BW	1.8BW	4.9	3.8BS	3.0	1.5BW	2.7
Barium	2.1B	2.6B	2.5B	3.5B	4.5B	1.8B	5.9B
Beryllium	0.21U	0.20U	0.21U	0.23U	0.31B	0.22U	0.23U
Cadmium	0.42U	0.41U	0.41U	0.46U	0.44U	0.44U	0.46U
Calcium	40.8B	52.1U	26.3U	42.6U	41.2U	33.1U	223N
Chromium	5.2	5.3	3.8	3.5U	4.4	4.7	5.7
Cobalt	0.65B	1.5B	2.1B	1.3B	1.1B	0.93B	1.3B
Copper	5.0B	2.9U	6.2	5.4B	4.7B	7.3	5.3B
Iron	2,000	2,690	2,950	2,490	4,270	1,870	3,550
Lead	0.79B	1.3	2.3	1.1	1.1B	1.1	2.1
Magnesium	17.2B	33.5B	24.6B	34.1B	44.9B	25.5B	70.4B
Manganese	9.4*J	31.9*	16.5*	7.5*	26.3*	16.1	20.9*J
Mercury	0.08U	0.09U	0.11U	0.09U	0.11U	0.12R	0.11U
Nickel	1.3U	1.2U	1.2U	1.4U	1.3U	1.3U	1.4U
Potassium	120B	144B	117B	125U	123B	121B	197B
Selenium	0.21U	0.21UW	0.22UW	0.22UW	0.24U	0.23UW	0.22UW

32/PR1-0356-739

			TABLE 4-8 (Continued)				
	IOS	IL SAMPLES C	L SAMPLES COLLECTED DURING THE RI METALS DATA	URING THE R			
Parameter	W-34 36-38 feet	W.35 34-38 feet	W-36 35-36 feet	W-37 34-36 feet	W-38 35-37 feet	W-40 39-41 feet	B7-P 153-160 feet
Silver	1.1U	1.0U	1.0U	1.1U	1.1U	1.1U	1.1U
Sodium	140B	118U	95.4	108U	115U	U721	193B
Thallium	0.42U	0.21U	0.22U	0.22U	0.24U	0.23U	0.43U
Vanadium	2.6B	5.5B	4.8B	4.1B	5.3B	2.7B	5.1B
Zinc	3.6B	3.3U	3.3B	3.7U	4.0B	3.5U	3.9B
Cyanide	0.62U	0.58U	0.56U	0.60U	0.63U	0.62U	0.56U

For a discussion on the meaning of the contaminant qualifiers, see Appendix E.

TABLE 4-8 (Continued)

SOIL SAMPLES COLLECTED DURING THE RITPH DATA

Sample	Total Petroleum Hydrocarbons (mg/kg) (TPH)
W-34 36-38'	29.4
W-35 34-38'	<13.4
W-36 35-36'	37.6
W-37 34-36'	16,800
W-38 35-37	<6.42
W-40 39-41'	129
B7-P 153-160'	< 13.8

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environmental engineers, scientists, planners, 3 management consultants

CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 316496/3400 (Fair 1516/496-3964

February 7, 1993

Mr. Peter J. Witkowski
Director of Hazardous Waste Services
Nassau County Department of Public Works
One West Street

One West Street Mineola, NY 11501

Subject: Nassau County Fireman's Training Facility

M/WBE Progress Report

Dear Mr. Witkowski:

Following is our report detailing project M/WBE activities from the project start to January 31, 1994. In addition, a review of progress being made towards achieving the established M/WBE-EEO objectives is included.

The following activities reflect M/WBE utilization for this period:

- o NOW Processing Inc,. a M/WBE firm, provided CDM with word processing and submitted invoices for a sum of \$133.00, which were approved for payment.
- o Savin Engineers, P.C., a MBE firm, submitted invoices for a sum of \$7,714.26, which were approved for payment.
- o Delta Well Drillers, a WBE firm, provided the CDM team with soil boring and well installation services. Submitted invoices totaling \$10,810.
- o The attached Table 1 lists the number of hours worked and corresponding pay of CDM women and minority employees for the referenced project, which may be considered for credit towards CDM's M/WBE utilization.

The total invoiced by MBE/WBE firms to date is \$18,657, or approximately 1 percent of the total estimated project cost at completion. In addition, CDM women and minority employees have accounted for an additional \$5,245 of work, or approximately 0.3% of the estimated total project cost at completion. The goal for MBE/WBE utilization is 20 percent of the total project cost.

Name Date Page 2

If you have any questions, please do not hesitate to call me.

Very truly yours

CAMP DRESSER & McKEE

Man Mairone

Michael Memoli, P.E. Senior Associate/Project Manager

CC:

(m13/wit3)

ATTACHMENT I

Employee	Hours	Dollars
Maureen Wynne	15.5	237.00
Sue Murphy	60.0	1,252.00
Barbara Stanton	47.0	1,272.00
Noelle Clarke	79.5	1,459.00
Donna Potorti	40.5	578.00
Lisa Granados	7.0	164.00
Miriam Kubiska	0.5	8.00
Cheryl Marshall	11.5	<u>195.00</u>
	Total	\$5.245.00

As of 1/22/94

(m13/atti)



CAMP DRESSER & McKEE

100 Crossways Park West Woodbury, New York 11797 496-8400, Fax: 496-8864

January 13, 1993

Mr. Scott Swanborn
Project Director
Inchcape Testing Services
Aquatec Laboratories
55 South Park Drive
Colchester, VT 05446

Subject: Nassau County Fireman's Training Center (FTC)

Laboratory Subcontract

Dear Mr. Swanborn:

Enclosed is a copy of an executed standard subcontract agreement between CDM and Aquatec for laboratory services associated with the FTC project.

If I can be of further assistance to you in regard to this matter, please do not hesitate to contact myself or Mark Maimone at (516) 496-8400.

Very truly yours,

CAMP DRESSER & MCKEE

Michael A. Memoli, PE

Project Manager/Senior Associate

cc: File w/encl.

C. Marshall w/encl.

parbara Stayton/for

P. Witkowski w/encl.

pw/scott



COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 11501-4822

January 8, 1993

Mr. John Isbister Malcolm Pirnie, Inc. One International Blvd. Mahwah, New Jersey 07495

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Re: Fireman's Training Center
Reallocation of Funds Between
Work Items
Supplemental Remedial Investigation
Capital Project No. S81020C

Dear Mr. Isbister:

Please refer to your letter of December 9, 1992, requesting an additional \$4,625.17 be reallocated to Work Item No. 26, SRI Site Investigation. The \$4,625.17 is broken down to \$3,570 for the drilling subcontractor and \$1,286.43 for reproductions.

Upon review of the original budget and subsequent amendments, there currently is a balance of \$530.54 remaining in the Work Item. The cost breakdown for Work Item No. 26 shows that 54,847.02 remains in the subcontractor drilling budget, whereas your firm's labor cost exceeded the approved budget by \$8,351.94. To approve the subcontractor drilling cost of \$3,570, it is necessary that a justification be submitted to this office for the \$8,351.94.

The cost associated with the additional reproductions are approved. Authorization is hereby given to withdraw \$760.35 from Work Item No. 27, SRI Data Validation. The withdrawn funds will be credited to Work Item No. 26. This reallocation of funds closes all work associated with Work Item No. 27.

John Isbister Malcolm Pirnie, Inc. January 8, 1993

Page Two

Re: Reallocation of Funds Between

Work Items

If you have any questions regarding this matter, please contact Peter J. Witkowski of our Hazardous Waste Services Unit at (516) 997-8282.

Very truly yours,

William albette PE.

John M. Waltz, P.E.

Acting Commissioner of Public Works

JMW: KGA: jm

George Heitzman, P.E., NYSDEC

James A. Oliva, Director of Environmental Operations
Acting Head, Division of Sanitation & Water Supply
Wayne Gaddy, Jr., Director of Construction FCPS

Acting Head, Division of Administration





December 9, 1992

Mr. Peter Witkowski Nassau County Department of Public Works 425 Salisbury Park Drive Westbury, New York 11590

Re: Nassau County Fireman's Training Center

Supplemental RI Invoice Capital Project No. S81020C

Dear Mr. Witkowski:

Malcolm Pirnie has completed the Supplemental RI and I have enclosed the final invoice for Malcolm Pirnie's labor. However, we have two outstanding invoices in the amount of \$3,400 from Empire Soils Investigation and \$1,225.17 from Tech Repro, Inc. in which copies are enclosed. Originally, the Empire invoice was submitted to us on March 30, 1992 in the amount of \$10,100. We did not approve this invoice because it was not reflective of the work performed. As part of Empire's agreement they were to be paid for the transport of drill spoils from the drill sites to a staging area in Bethpage State Park at a rate of \$100 per yard. The amount of materials to be moved was to be based on volume calculation from the borehole. Based on the volume calculation we came to an agreement that 34 yards of drill cuttings were handled at a cost of \$3,400. In our request for additional money to complete the Supplemental RI, I inadvertently forgot to include an estimate of Empire's work in our budget because of Empire's slow response (six months) to our disapproval of their original invoice.

The invoices from Tech Repro are for 15 additional copies of the RI report that the County requested. These copies were an out-of-scope request. The associated cost of these additional copies is \$1,225.17, which is the direct cost plus a 10% administrative fee.

We respectfully request that an additional \$4,625.17 be reallocated to Work Item No. 26 to cover these invoices. We are submitting Empire's invoice as a direct cost and we are not including the contractual five percent administrative fee.

1 INTERNATIONAL BOULEVARD MAHWAH. NJ 07495-0018 201-529-4700 FAX 201-529-1415



Mr. Peter Witkowski Nassau County Department of Public Works December 9, 1992 Page 2

We thank you for your consideration to this request and if you have any questions, please call.

Very truly yours,

MALCOLM PIRNIE, INC.

Terrance R. Haelen

Senior Project Hydrogeologist

c: K. Arnold, NCDPW M. Sullivan, MPI

J. Isbister, MPI

dt 32/Witkow5.ltr /7190



MAIL HEMITTANCE TO:

P.O. BOX 64272 **BALTIMORE, MD 21264**

5 KNABNER ROLOGO, BOX 2199, BALLSTON SPA. NY 12020 518-899-7491 S-5187 SOUTH PARK AVENUE, HAMBURG, NY 14075 716-649-8110

☐ 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881 35 NATIONAL ROAD, EDISON, NJ 06817 201-287-2224

3 536 SUMMIT POINT DRIVE, HENRIETTA, NY 14467 716-359-1980 PLEASE INDICATE OUR INVOICE NO. & JOB NO. ON YOUR CHECK WHEN SUBMITTING PAYMENT. MORGANTOWN IND. PARK, P.O. BOX 189, MORGANTOWN, PA 19543 215-286-6657

Malcolm Pirnie, Inc. TO One International Boulevard Mahwah New Jersey 07495-0018

Attention: Mr. Shane McDonald

Fireman's Training Center JOB: Nassau County, NY

|--|

Item Description <u>Unit Fee</u> Quantity Fee Drill Spoils \$100/yd 34 yds. \$3,400.00 TEUEL ED

IN ACCOUNTING

SEP 30 1992

TOTAL AMOUNT DUE:

\$ 3,400.00

MALCOLM PIRNIE INC. MURTHERN N.J.

Account: 6 6 0 1 - 0 0 30

Project 0726.53-1000

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Net 30 Days with 13% interest per month on unpaid balances

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MAIL REMITTANCE TO: P.O. BOX 64272 BALTIMORE, MD 21264

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TO Malcolm Pirnie, Inc.

One International Boulevard

Mahwah

New Jersey 07495-0018

Attention: Mr. Stephen G. Morgan

Project Hydrogeologist

Fireman's Training Center Nassau County, NY

PURCHASE ORDER NO.

JOB NO.

MD-91-314

INVOICE DATE
9/24/92

INVOICE NO.

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COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS MINEOLA, NEW YORK 115014822

January 7, 1993

Mr. John Isbister Malcolm Pirnie, Inc. One International Blvd. Mahwah, New Jersey 07495

RE: Fireman's Training Center
Reallocation of Funds Between
Work Items
RI/FS Public Meeting
Capital Project No. S81020C

Dear Mr. Isbister:

Please refer to your letter of December 18, 1992, where \$28,612 is requested to prepare and present the findings of the Remedial Investigation, Feasibility Study and Endangerment Assessment at the public meeting scheduled for January 12th, 1993, at the Old Bethpage village Restoration Auditorium.

Authorization is hereby given to withdraw a total of \$28,612 from Work Item Three, Subcontractor Drilling. The funds will be reallocated to a new Work Item 31, RI/FS Public Meeting.

If you have any questions, please do not hesitate to contact Mr. Kenneth G. Arnold, of our Hazardous Waste Services Unit, at (516) 997-8282.

Very truly yours,

John M. Waltz, P.E.

William albotta VF

Acting Commissioner of Public Works

JMW: KGA: jm

cc: George Heitzman, P.E., NYSDEC

James A. Oliva, Acting Head, Division of Sanitation and Water Supply

Wayne Gaddy, Jr., Acting Head, Division of Administration



MALCOLM PIRNIE

MALCOLM PIRNIE, INC. ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

December 18, 1992

Mr. Peter Witkowski Nassau County Department of Public Works 425 Salisbury Park Drive Westbury, New York 11590

Re: Nassau County Fireman's Training Center

Capital Project No. S81020C

Proposal to Prepare for and Attend the Public Meeting on the RI/FS

Dear Mr. Witkowski:

Malcolm Pirnie is pleased to submit this proposal for additional engineering services in connection with the RI/FS for the Fireman's Training Center. This scope of work includes the preparation of the RI/FS presentation to be given at the public meeting in Bethpage, New York on Tuesday, January 12, 1993. The presentation will be divided into three parts: the Remedial Investigation, the Feasibility Study, and the Endangerment Assessment. We understand that the meeting will be moderated by you and you will also introduce the other speakers.

The Remedial Investigation presentation will be developed to discuss the RI and supplemental RI activities, and to discuss the on-site soil and groundwater contamination and the off-site plume. The Feasibility Study presentation will be developed to discuss alternative treatment options for on-site shallow soils, deep soils and groundwater, and for off-site groundwater. The RI/FS presentation will be given by Richard Brownell. Estimated time for preparation and presentation is 40 hours.

The Endangerment Assessment (EA) presentation will be developed to give a summary of the endangerment assessment. This presentation will be given by John Henningson. Estimated time for preparation and presentation is 40 hours. As requested by you, the PRAP will be used as a guide in preparing the presentations. The estimated time for the presentation will be 20 to 30 minutes each for the RI and FS and 15 to 20 minutes for the EA. It is also understood that no other additional technical personnel will be required to attend the meeting.

Malcolm Pirnie will prepare about 35 slides for the presentation. Where appropriate, existing slides, handouts, and other material from the first public meeting will be used. In addition, an in-house "dry-run" presentation will be given. Technical assistance in the preparation of the slides and the presentation will be given by Terrance Haelen, Susan Dugas, Catherine Bobenhausen, Stephen Swope, Richard Califano and Shane McDonald. Additional staff may be used at times in place of the above. Time will also be charged by various drafters to prepare the slides. We have already spent approximately 24 hours attending meetings with the County to discuss the format of the public meeting and planning the approach.

1 INTERNATIONAL BOULEVARD MAHWAH, NJ 07495-0018 201-529-4700 FAX 201-529-1415



Mr. Peter Witkowski Nassau County Department of Public Works December 18, 1992 Page 2

COST OF SERVICES

The cost of these services will be calculated on a time and material basis in accordance with our current contract with Nassau County (Capital Project No. S81020C). The overall cost estimate to prepare for, and attend, the public meeting is \$27,562. Details of the costs are given in Table 1.

In addition to Malcolm Pirnie personnel, at your request, we have obtained a cost estimate for a legal stenographer to record the proceedings of the meeting. The cost estimate for the stenographer is \$1,050. This estimate is based on a 4-hour meeting, with the stenographer recording 40 pages per hour. If the meeting continues for a longer period of time, or if the stenographer records more pages per hour, there would be additional charges at a rate of \$6.35 per page. The original stenographer's recording and two copies are included in this price.

We respectfully request written authorization to proceed with this work. A new work item number (No. 32) needs to be assigned for the public meeting task.

The total cost is estimated at \$28,612 as given in Table 1. We look forward to working with you on this project.

Very truly yours,

MALCOLM PIRNIE, INC.

Le Totale half

John Isbister, CPG

Vice President

dt

c: K. Arnold, NCDPW

T. Haelen, MPI

M. Sullivan, MPI

32/0726-566-100 /Witkows.Ltr



TABLE 1 NASSAU COUNTY FIREMAN'S TRAINING CENTER RI/FS PUBLIC MEETING									
COST ESTIMATE									
	HOURS	COST	TOTAL						
SCOPING MEETIN	IGS AND PLANNING								
PM PE/PS	8 16	\$ 161 \$ 110	\$ 1,288 \$ 1,760						
REMEDIAL INVES	STIGATION/FEASIBI	LITY STUDY							
PM PE/PS ES TECH	40 35 48 40	\$ 161 \$ 110 \$ 70 \$ 55	\$ 6,440 \$ 3,850 \$ 3,360 \$ 2,420						
ENDANGERMENT	ASSESSMENT								
PM PE/PS TECH	24 16 24	\$ 161 \$ 110 \$ 55	\$ 3,864 \$ 1,760 \$ 1,320						
	TOTAL LABOR:		\$26,062						
	OTHER DIRECT COSTS:								
	MALCOLM PIRNIE	TOTAL:	\$27,562						
COST FOR LEGAL	STENOGRAPHER:	\$1,050.00							
TOT	AL:	\$28,612							