

Attachment C-3

Report Name: NYSDEC Letter to NRG Huntley – BUD - Soil Reuse as Berm
(including soil analytical Results)

Site Name: Huntley Generating Station – Tonawanda, New York

Report Dated: October 4, 2007

Prepared by: NYSDEC

of pages: 8

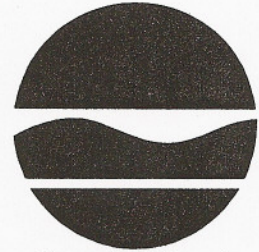
New York State Department of Environmental Conservation

Division of Solid & Hazardous Materials, Region 9

270 Michigan Avenue, Buffalo, New York, 14203-2999

Phone: (716) 851-7220 • FAX: (716) 851-7226

Website: www.dec.state.ny.gov



Alexander B. Grannis
Commissioner

October 4, 2007

Mr. Joseph J. Pietro
NRG Huntley Operations Inc.
3500 River Road
Tonawanda, New York 14150

Dear Mr. Pietro:

Reuse of Soil on-site at Huntley Power Plant

I am writing in response to your letter dated September 28, 2007 regarding the re-use of excavated soil from on-going building modifications on-site at the Huntley Power Plant in Tonawanda.

The Department has reviewed this analytical data and determined that it may be used on-site according to predetermined Beneficial Use Determination 360-1.15(b)(8). As requested, the soil may be used in the construction of a berm between River Road and the site. When complete, this berm must be covered with one foot of clean topsoil and seeded. In addition, the material must be placed above the seasonal high water table and any wetland or drainage areas must be avoided.

There are elevated levels of arsenic in this material. We want to make sure that this soil cannot be mistaken for clean soil and be exposed or taken off site. This could consist of a deed restriction and/or map with areas marked as historic fill or soils not to be disturbed without environmental review.

If you have any questions, please contact Ms. Efrat Forget of my staff at (716) 851-7220.

Sincerely,

A handwritten signature in black ink that reads "Mark J. Hans".

Mark J. Hans, P.E.
Regional Solid Materials Engineer

MJH:dcg
hans/pietro-oc1.ltr

cc: Ms. Efrat Scharf Forget, P.E., Environmental Engineer II

**Huntley Generating Station Tonawanda, New York
Soil Analytical Data-September 2007**

Parameter	Sample Location	Boring S-5 @ 4' - 6'		Boring S-5 @ 20' - 22'		Boring S-10 @ 4' - 6'		TP-2 @ 0' - 6'		TP-3 @ 0' - 6.5'		TP-4 @ 0' - 6.5'		TP-1 @ 0' - 6'		Unrestricted Use soil cleanup objectives	Restricted Use Soil Cleanup Objectives			
		Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit		Residential	Restricted Residential	Commercial	Industrial
Hexachlorobenzene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433	0.33	0.33	1.2	6	12
Hexachloroethane		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Hexachlorocyclopentadiene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Hexachlorobutadiene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
N-Nitroso-di-n-propylamine		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
N-Nitrosodiphenylamine		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
N-Nitrosodimethylamine		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Isophorone		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Benzyl alcohol		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
Dibenzofuran		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433	7	14	59	350	1000
2-Methylnaphthalene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Dibenz (a,h) anthracene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433	0.33	0.33	0.33	0.56	1.1
Fluoranthene		NT		NT		NT		ND	0.362	ND	0.322	0.467		0.639		100	100	100	500	1000
Fluorene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433	30	100	100	500	1000
Indeno (1,2,3-cd) pyrene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433	0.5	0.5	0.5	5.6	11
Naphthalene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433	12	100	100	500	1000
Phenanthrene		NT		NT		NT		ND	0.362	ND	0.322	0.336		0.461		100	100	100	500	1000
Pyrene		NT		NT		NT		ND	0.362	ND	0.322	0.417		0.571		100	100	100	500	1000
Acenaphthylene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433	100	100	100	500	1000
1,2-Dichlorobenzene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
1,3-Dichlorobenzene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
1,4-Dichlorobenzene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
1,2,4-Trichlorobenzene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Nitrobenzene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2,4-Dinitrotoluene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2,6-Dinitrotoluene		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Bis (2-chloroethyl) ether		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Bis (2-chloroisopropyl) ether		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Bis (2-chloroethoxy) methane		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
4-Bromophenyl phenyl ether		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
4-Chlorophenyl phenyl ether		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Benzidine		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
3,3'-Dichlorobenzidine		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
4-Chloroaniline		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2-Nitroaniline		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
3-Nitroaniline		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
4-Nitroaniline		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
Acids (ppm)		NT		NT		NT														
Phenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433	0.33	100	100	500	1000
2-Chlorophenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2,4-Dichlorophenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2,6-Dichlorophenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2,4,5-Trichlorophenol		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
2,4,6-Trichlorophenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
Pentachlorophenol		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08	0.8				
4-Chloro-3-methylphenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2-Methylphenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
3&4-Methylphenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2,4-Dimethylphenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
2-Nitrophenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
4-Nitrophenol		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
2,4-Dinitrophenol		NT		NT		NT		ND	0.362	ND	0.322	ND	0.316	ND	0.433					
4,6-Dinitro-2-methylphenol		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
Benzoic acid		NT		NT		NT		ND	0.904	ND	0.805	ND	0.791	ND	1.08					
Metals (ppm)		NT		NT		NT														
Aluminum		NT		NT		NT		67700		16400		6070		41700						
Antimony		NT		NT		NT		<4.23		<5.72		<4.46		<8.39						
Arsenic		NT		NT		NT		36.1		60		99.6		85.4		13	16	16	16	16
Barium		NT		NT		NT		422		97.7		109		454		350	350	400	400	10000
Beryllium		NT		NT		NT		3.61		1.36		0.89		3.62		7.2	14	72	590	2700
Cadmium		NT		NT		NT		0.89		<.477		0.488		0.709		2.5	2.5	4.3	9.3	60
Calcium		NT		NT		NT		17200		15100		7550		12300						
Chromium	Hexavalent	NT		NT		NT		156		29.9		17.5		62.1		1	22	110	400	800
	Trivalent	NT		NT		NT		156		29.9		17.5		62.1		30	36	180	1500	6800

**Huntley Generating Station Tonawanda, New York
Soil Analytical Data-September 2007**

Parameter	Sample Location	Boring S-5 @ 4' - 6'		Boring S-5 @ 20' - 22'		Boring S-10 @ 4' - 6'		TP-2 @ 0' - 6'		TP-3 @ 0' - 6.5'		TP-4 @ 0' - 6.5'		TP-1 @ 0' - 6'		Restricted Use Soil Cleanup Objectives				
		Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Unrestricted Use soil cleanup objectives	Residential	Restricted Residential	Commercial	Industrial
Cobalt		NT		NT		NT		17.6		10.7		6.56		30.6						
Copper		NT		NT		NT		23		20		39.3		86.1		50	270	270	270	10000
Iron		NT		NT		NT		113000		47100		52200		69600						
Lead		NT		NT		NT		11.5		10.1		109		30.6		63	400	400	1000	3900
Magnesium		NT		NT		NT		2820		1700		1430		1980						
Manganese		NT		NT		NT		249		114		272		213		1600	2000	2000	10000	10000
Mercury		NT		NT		NT		0.1113		<.0075		<.0068		0.1484		0.18	0.81	0.81	2.8	5.7
Nickel		NT		NT		NT		34.4		20.7		20.3		32.1		30	140	310	310	10000
Potassium		NT		NT		NT		5090		1800		826		2520						
Selenium		NT		NT		NT		<.359		1.03		2.77		4.04		3.9	36	180	1500	6800
Silver		NT		NT		NT		<.720		<.953		<.744		<1.40		2	36	180	1500	6800
Sodium		NT		NT		NT		2140		369		326		1890						
Thallium		NT		NT		NT		<.432		<.572		<.446		<.839						
Vanadium		NT		NT		NT		67.5		26.3		21.9		71.9						
Zinc		NT		NT		NT		42.7		52.8		59.6		70.4		109	2200	10000	10000	10000
Pesticide Identification (ppm)		NT		NT		NT														
Aldrin		NT		NT		NT		0.00573		ND	0.00322	ND	0.00317	ND	0.00431	0.005	0.019	0.097	0.68	1.4
alpha-BHC		NT		NT		NT		ND	0.00363	ND	0.00322	0.00485	ND	0.00431	0.02	0.097	0.48	3.4	6.8	
beta-BHC		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	0.036	0.072	0.36	3	14
delta-BHC		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	0.04	100	100	500	1000
gamma-BHC		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431					
alpha-Chlordane		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	0.094	0.91	4.2	24	47
gamma-Chlordane		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431					
4,4'-DDD		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	0.0033	2.6	13	92	180
4,4'-DDE		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	0.0033	1.8	8.9	62	120
4,4'-DDT		NT		NT		NT		0.00522		0.00522		0.00527		ND	0.00431	0.0033	1.7	7.9	47	94
Dieldrin		NT		NT	0.00493	NT		0.00519		0.00493		0.00498		ND	0.00431	0.005	0.039	0.2	1.4	2.8
Endosulfan I		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	2.4	4.8	24	200	920
Endosulfan II		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	2.4	4.8	24	200	920
Endosulfan Sulfate		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	2.4	4.8	24	200	920
Endrin		NT		NT		NT		0.00624		ND	0.00322	ND	0.00317	ND	0.00431	0.014	2.2	11	89	410
Endrin Aldehyde		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431					
Heptachlor		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431	0.042	0.42	2.1	15	29
Heptachlor Epoxide		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431					
Methoxychlor		NT		NT		NT		ND	0.00363	ND	0.00322	ND	0.00317	ND	0.00431					
Toxaphene		NT		NT		NT		ND	0.181	ND	0.161	ND	0.159	ND	0.215					
PCB Identification (ppm)		NT		NT		NT														
Aroclor 1016		NT		NT		NT		ND	0.378	ND	0.332	ND	0.323	ND	0.44					
Aroclor 1221		NT		NT		NT		ND	0.378	ND	0.332	ND	0.323	ND	0.44					
Aroclor 1232		NT		NT		NT		ND	0.378	ND	0.332	ND	0.323	ND	0.44					
Aroclor 1242		NT		NT		NT		ND	0.378	ND	0.332	ND	0.323	ND	0.44					
Aroclor 1248		NT		NT		NT		ND	0.378	ND	0.332	ND	0.323	ND	0.44					
Aroclor 1254		NT		NT		NT		ND	0.378	ND	0.332	ND	0.323	ND	0.44					
Aroclor 1260		NT		NT		NT		ND	0.378	ND	0.332	ND	0.323	ND	0.44					
PHC Classification (ppm)		NT		NT		NT														
Heavy Weight PHC as: Lube Oil		NT		NT		NT		60		53										
Medium Weight PHC as: Fuel Oil #6		NT		NT		NT				213		538								
Petroleum Hydrocarbon		NT		NT		NT								ND	12.3					
pH		NT		NT		NT		7.27		6.93		6.99		6.72						
Flashpoint (°C)		NT		NT		NT		>70		>70		>70		>70						

exceeds unrestricted use soil cleanup objectives
 exceeds industrial use soil cleanup objectives

All units are ppm
Soil cleanup objectives were obtained from New York State Department of Environmental Conservation Regulations Chapter IV Subchapter B Part 375 Subpart 375-6 Section 375-6.8

Client: SJB Services, Inc.

Lab Project No.: 07-3149

Client Job Site: NRG Huntley

Lab Sample No.: 10406

Client Job No.: N/A

Sample Type: Soil

Field Location: TP-1

Date Sampled: 09/04/2007

Field ID No.: N/A

Date Received: 09/06/2007

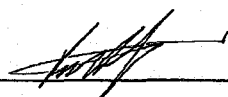
Laboratory Report for TAL Metals Analysis in Solid

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	09/12/2007	SW846 6010	41700
Antimony	09/12/2007	SW846 6010	<8.39
Arsenic	09/12/2007	SW846 6010	85.4
Barium	09/12/2007	SW846 6010	454
Beryllium	09/12/2007	SW846 6010	3.62
Cadmium	09/12/2007	SW846 6010	0.709
Calcium	09/12/2007	SW846 6010	12300
Chromium	09/12/2007	SW846 6010	62.1
Cobalt	09/12/2007	SW846 6010	30.6
Copper	09/12/2007	SW846 6010	86.1
Iron	09/13/2007	SW846 6010	69600
Lead	09/12/2007	SW846 6010	30.6
Magnesium	09/12/2007	SW846 6010	1980
Manganese	09/12/2007	SW846 6010	213
Mercury	09/11/2007	SW846 7471	0.1484
Nickel	09/12/2007	SW846 6010	32.1
Potassium	09/12/2007	SW846 6010	2520
Selenium	09/12/2007	SW846 6010	4.04
Silver	09/12/2007	SW846 6010	<1.40
Sodium	09/12/2007	SW846 6010	1890
Thallium	09/12/2007	SW846 6010	<0.839
Vanadium	09/12/2007	SW846 6010	71.9
Zinc	09/12/2007	SW846 6010	70.4

ELAP ID No.:10958

Comments:

Approved By:


 Bruce Hoogesteger, Technical Director

Client: SJB Services, Inc.

Lab Project No.: 07-3149

Lab Sample No.: 10403

Client Job Site: NRG Huntley

Sample Type: Soil

Client Job No.: N/A

Date Sampled: 09/04/2007

Field Location: TP-2

Date Received: 09/06/2007

Field ID No.: N/A

Laboratory Report for TAL Metals Analysis in Solid

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	09/12/2007	SW846 6010	67700
Antimony	09/12/2007	SW846 6010	<4.23
Arsenic	09/12/2007	SW846 6010	36.1
Barium	09/12/2007	SW846 6010	422
Beryllium	09/12/2007	SW846 6010	3.61
Cadmium	09/12/2007	SW846 6010	0.890
Calcium	09/12/2007	SW846 6010	17200
Chromium	09/12/2007	SW846 6010	156
Cobalt	09/12/2007	SW846 6010	17.6
Copper	09/12/2007	SW846 6010	23.0
Iron	09/13/2007	SW846 6010	113000
Lead	09/12/2007	SW846 6010	11.5
Magnesium	09/12/2007	SW846 6010	2820
Manganese	09/12/2007	SW846 6010	249
Mercury	09/11/2007	SW846 7471	0.1113
Nickel	09/12/2007	SW846 6010	34.4
Potassium	09/12/2007	SW846 6010	5090
Selenium	09/12/2007	SW846 6010	<0.359
Silver	09/12/2007	SW846 6010	<0.720
Sodium	09/12/2007	SW846 6010	2140
Thallium	09/12/2007	SW846 6010	<0.432
Vanadium	09/12/2007	SW846 6010	67.5
Zinc	09/12/2007	SW846 6010	42.7

ELAP ID No.:10958

Comments:

 Approved By: 

Bruce Hoogesteger, Technical Director



179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: SJB Services, Inc.

Lab Project No.: 07-3149

Client Job Site: NRG Huntley

Lab Sample No.: 10404

Client Job No.: N/A

Sample Type: Soil

Field Location: TP-3

Date Sampled: 09/04/2007

Field ID No.: N/A

Date Received: 09/06/2007

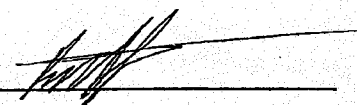
Laboratory Report for TAL Metals Analysis in Solid

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	09/12/2007	SW846 6010	16400
Antimony	09/12/2007	SW846 6010	<5.72
Arsenic	09/12/2007	SW846 6010	60.0
Barium	09/12/2007	SW846 6010	97.7
Beryllium	09/12/2007	SW846 6010	1.36
Cadmium	09/12/2007	SW846 6010	<0.477
Calcium	09/12/2007	SW846 6010	15100
Chromium	09/12/2007	SW846 6010	29.9
Cobalt	09/12/2007	SW846 6010	10.7
Copper	09/12/2007	SW846 6010	20.0
Iron	09/13/2007	SW846 6010	47100
Lead	09/12/2007	SW846 6010	10.1
Magnesium	09/12/2007	SW846 6010	1700
Manganese	09/12/2007	SW846 6010	114
Mercury	09/11/2007	SW846 7471	<0.0075
Nickel	09/12/2007	SW846 6010	20.7
Potassium	09/12/2007	SW846 6010	1800
Selenium	09/12/2007	SW846 6010	1.03
Silver	09/12/2007	SW846 6010	<0.953
Sodium	09/12/2007	SW846 6010	369
Thallium	09/12/2007	SW846 6010	<0.572
Vanadium	09/12/2007	SW846 6010	26.3
Zinc	09/12/2007	SW846 6010	52.8

ELAP ID No.:10958

Comments:

Approved By: _____


Bruce Hoogesteger, Technical Director

Client:	<u>SJB Services, Inc.</u>	Lab Project No.:	07-3149
Client Job Site:	NRG Huntley	Lab Sample No.:	10405
Client Job No.:	N/A	Sample Type:	Soil
Field Location:	TP-4	Date Sampled:	09/04/2007
Field ID No.:	N/A	Date Received:	09/06/2007

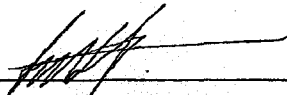
Laboratory Report for TAL Metals Analysis in Solid

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	09/12/2007	SW846 6010	6070
Antimony	09/12/2007	SW846 6010	<4.46
Arsenic	09/12/2007	SW846 6010	99.6
Barium	09/12/2007	SW846 6010	109
Beryllium	09/12/2007	SW846 6010	0.890
Cadmium	09/12/2007	SW846 6010	0.488
Calcium	09/12/2007	SW846 6010	7550
Chromium	09/12/2007	SW846 6010	17.5
Cobalt	09/12/2007	SW846 6010	6.56
Copper	09/12/2007	SW846 6010	39.3
Iron	09/13/2007	SW846 6010	52200
Lead	09/12/2007	SW846 6010	109
Magnesium	09/12/2007	SW846 6010	1430
Manganese	09/12/2007	SW846 6010	272
Mercury	09/11/2007	SW846 7471	<0.0068
Nickel	09/12/2007	SW846 6010	20.3
Potassium	09/12/2007	SW846 6010	826
Selenium	09/12/2007	SW846 6010	2.77
Silver	09/12/2007	SW846 6010	<0.744
Sodium	09/12/2007	SW846 6010	326
Thallium	09/12/2007	SW846 6010	<0.446
Vanadium	09/12/2007	SW846 6010	21.9
Zinc	09/12/2007	SW846 6010	59.6

ELAP ID No.:10958

Comments:

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Bruce Hoogesteger, Technical Director