

Division of Hazardous Waste Remediation

Record of Decision

Former Miller Container Site Town of Volney, Oswego County Site Number 7-38-029

March 1995

New York State Department of Environmental Conservation GEORGE PATAKI, Governor MICHAEL ZAGATA, Commissioner

DECLARATION STATEMENT - RECORD OF DECISION

Former Miller Container Inactive Hazardous Waste Site Town of Volney, Oswego County, New York Site No. 7-38-029

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Former Miller Container inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Miller Container Division Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B.

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 ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) for the Former Miller Container and the criteria identified for evaluation of alternatives the NYSDEC has selected a system of extraction wells to capture groundwater contamination, a vapor extraction system for treating contaminated soils (source control), a groundwater treatment system with discharge to surface water, and a monitoring plan sufficient to assess the effectiveness of the remedy. The major elements of the selected remedy include:

A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. Uncertainties identified during the RI/FS will be resolved.

- o A groundwater collection and treatment system consisting of 13 recovery wells connected to a treatment area located adjacent to the existing main building.
- o Soil vapor extraction to remove contaminants in the southern source area to levels that are protective of groundwater.
- o Monitoring the different elements of the remedy to determine its effectiveness and identify changes necessary to achieve the remedial objectives for the site.
- o Continued operation of the public water treatment system as necessary to prevent the entry of site related contaminants into the public water system.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the statutory preference for remedies that reduce toxicity, mobility, or volume as a principal element.

Date

Michael J. O'Toole, Jr., P.E.

Director

Division of Hazardous Waste Remediation

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Glossary of Acronyms

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act

DCA: Dichloroethane DCE: Dichloroethene

ECL: Environmental Conservation Law FWIA: Fish and Wildlife Impact Analysis

NA: Not Available

NCP: National Contingency Plan

ND: Not Detected

NYCRR: N.Y. Codes, Rules, and Regulations

NYSDEC: N.Y. State Department of Environmental Conservation

NYSDOH: N.Y. State Department of Health

O&M: Operation and Maintenance

PCE: Tetrachloroethene ppb: parts per billion ppm: parts per million

PRAP: Proposed Remedial Action Plan

RI/FS: Remedial Investigation and Feasibility Study

ROD: Record of Decision

SCG: Standards, Criteria, and Guidance

SPDES: State Pollution Discharge Elimination System

TCA: Trichloroethane TCE: Trichloroethene

TWA Time-Weighted Average

VC: Vinyl Chloride

VOC: Volatile Organic Compound

Notice

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RECORD OF DECISION FORMER MILLER CONTAINER SITE SITE ID NO. 7-38-029

SECTION 1: INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected a combined groundwater pump and treat and vapor extraction system for the Former Miller Container Site Number 7-38-029. This remedy will address the threat to human health and the environment created by the presence of chlorinated solvents in soils and groundwater at the site. The site is located upgradient of several public water supply wells. Contaminants from the site have impacted the water quality of at least two of these wells. The contaminated wells were taken out of service until a water treatment plant capable of removing the contamination was constructed by Miller. The plant went into service in June 1992 and has operated satisfactorily since then.

SECTION 2: SITE LOCATION AND DESCRIPTION

The Former Miller Container Site is located in the Town of Volney, Oswego County, on the east side of Route 57, approximately 1500 feet south of the intersection of Routes 57 and 481 (see Figure 1). The site is situated just outside the City of Fulton. The site is approximately 40 acres in size and is bordered on the north and east by Route 481, on the south by the Miller Brewery, and on the west by Route 57 and a property occupied by a two-story apartment building.

Area land usage is a combination of residential and light industrial. The site has a low, rolling topography with local relief (elevation) ranging from 362 feet above mean sea level (AMSL) to 386 feet AMSL. The property consists of a well manicured lawn with ornamental plantings of trees scattered around the site. The Container Plant, now owned and operated by Reynolds Metals, is located near the south property line approximately 1000 feet east of Route 57.

A shallow manmade pond is located 250 feet northwest of the Plant. The Oswego River is located on the opposite side of Route 57 from the site. A strip of land, between Route 57 and the river, ranging in width from 150 to 350 feet, is occupied by the City of Fulton municipal water facility including three production wells (see Figure 2).

The site is underlain by glacial and lake deposits consisting of a variety of sand, gravel, silt, and clay. These formations range in thickness from 20 feet east of the plant to near 90 feet in the center area of the site. These unconsolidated sediments are underlain by bedrock which consists of interbedded shale, sandstone, and mudstone. Two of the most distinct stratigraphic features of the site are the layers of coarse till which overlie the bedrock in most locations. The lower till is an extremely dense lodgement till overlaid by a loose and permeable ablation till. The lodgement till is a significant barrier to the vertical migration of groundwater.

Groundwater in the area of the site occurs in the overburden and in the underlying bedrock. Overburden groundwater flows in a generally westward direction toward the Oswego River. No site data is available on the flow direction in the bedrock aquifer, however, regional flow is north toward Lake Ontario.

Immediately north of the Fulton Municipal Well Field, a fuel spill (Spill Number 91-06796) being managed by the Region 7 Spill Response Program, occurred. The fuel spill is being treated and contained by several extraction wells and a water treatment unit (i.e., air stripper). Data from monitoring wells indicates no contaminant migration toward the public water supply beyond the extraction wells.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

1976-86: Container Plant construction was completed in 1976. Part of the plant design included a 500 gallon spill containment tank located outside the western corner of the plant. This tank was connected by three pipelines to trench drains in the drum storage room inside the plant. In April 1986, as part of a system-wide upgrading operation, Miller excavated and removed the tank and its associated pipes. Though there was no record of spills at the plant, visibly stained soil was noted below the tank and pipes during the removal. The tank's contents consisted of spent solvents including methylene chloride, trichloroethane, trichloroethene, tetrachloroethene, toluene, and xylene.

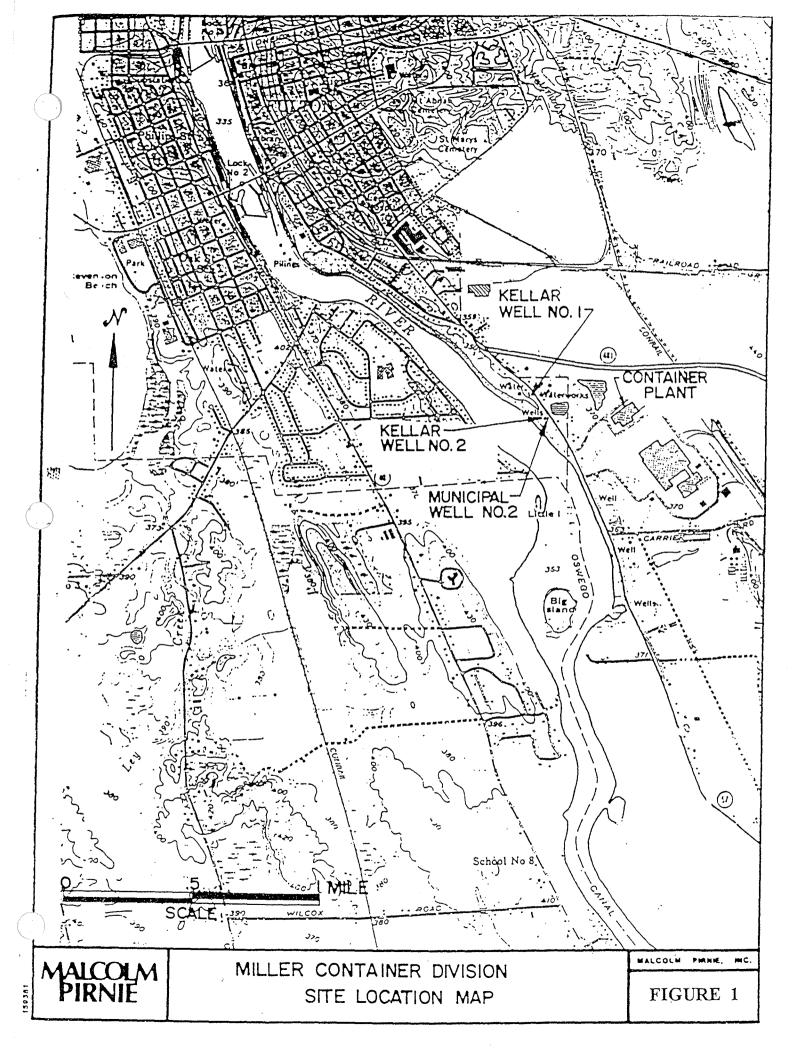
1990: As part of the ongoing investigation, Miller Brewing Company, the Potentially Responsible Party (PRP), conducted a soil gas survey in several areas of the site. Locations for the survey were chosen on the basis of historical/anecdotal information and groundwater sampling results which could not easily be explained by known spills or releases. The survey identified potential contamination outside the southern corner of the plant, near the sewer line along Route 57, at the corner of the north parking lot, and east of the Taylor property fence line located 775 feet west of the plant.

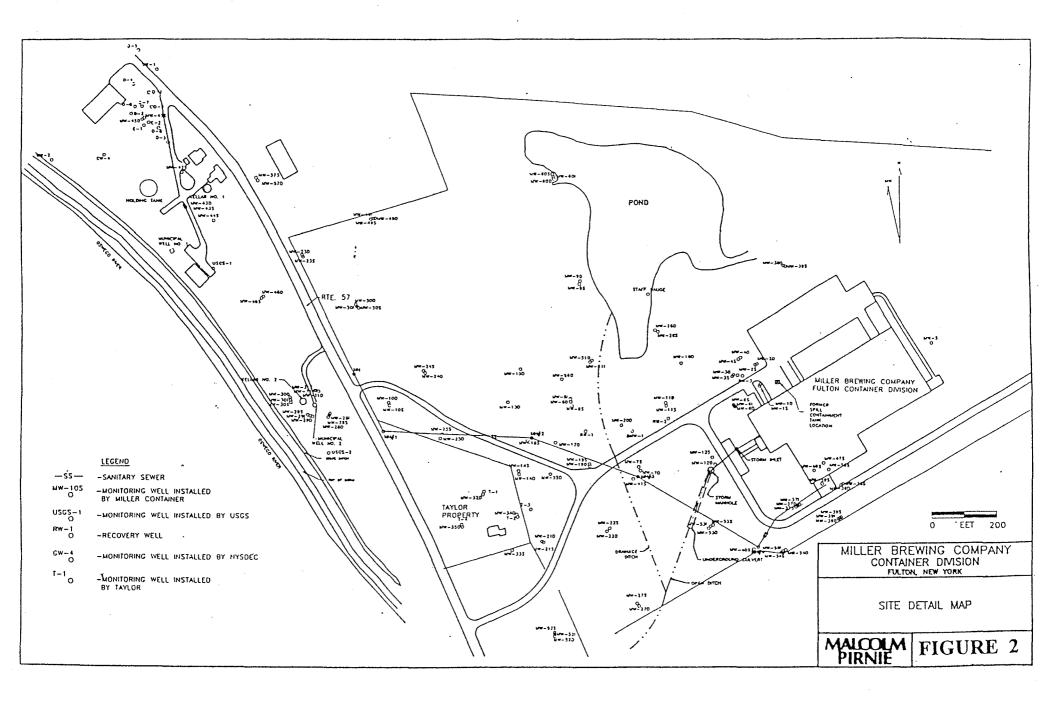
April 1991: Miller informed the NYSDEC of the discovery of oil and VOC contamination of soil beneath the floor of the plant near the southern corner. This release was discovered during the excavation of a sump. This work was being done as part of an effort to remove underground tanks at the plant.

None of the above contamination could be linked to a specific release. Most of the contamination appears to be the result of past practices at and around the plant.

3.2: Previous Investigations

In April 1986 Miller, the PRP, retained Day Engineering to collect samples of the containment tank contents and the soil surrounding the tank. The results of this sampling led the PRP to retain





Calocerinos and Spina (C&S) to perform the first phase of a hydrogeologic investigation later in 1986. Ten soil borings were completed and wells were installed in four of the borings. Data from these wells indicated significant groundwater contamination in the area of the spill containment tank. The direction of groundwater flow was also determined. In August 1985 tetrachloroethene (PCE) was detected at Municipal Well #2 (M2), one of three Fulton water supply wells then in operation to the west of the site. PCE was detected at a concentration of 2 parts per billion (ppb). At that time there was no readily identifiable source for this contamination and the level detected was far below guidance values then in effect (50 ppb). The NYSDEC requested that Miller begin regular sampling of M2. Miller instead proposed that a well pair (MW-10S & 10D) be installed along the property line between M2 and the spill tank. This was agreed to by the Department.

In September 1986 Miller retained Malcolm Pirnie, Inc. (MPI) to conduct the second phase of the investigation. A total of 27 monitoring wells were installed at this point in the investigation. Miller proposed a groundwater remediation protocol in February 1987. The NYSDEC and Miller negotiated a Consent Order for an Interim Remedial Measure (IRM) outlined in the groundwater remediation protocol. Three recovery wells (RW-1, 2,&3) were installed in April 1987 and the construction of the treatment system (air stripper) was begun in November 1987. The recovery system was put into operation 1987. The recovery system was put into operation in June 1988.

Due to continuing deterioration of the water quality across the site and at the municipal well field, the site investigation was expanded. Miller agreed to perform a full Remedial Investigation and Feasibility Study (RI/FS). The RI/FS Workplan was approved in February 1991. The RI Report was submitted in August 1993 and final approval was given by the Department in October 1993. Due to some differences in data interpretation, Miller conducted supplementary field work and submitted a report in July 1994.

A draft FS was received in July 1994 and changes to the FS were approved in September 1994.

3.3: Enforcement Status

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The NYSDEC and the Miller Brewing Company entered into a Consent Order in April 1990. The Order obligates the responsible parties to carry out an RI/FS only. Upon issuance of the Record of Decision, the NYSDEC will request that the PRPs implement the selected remedy under an Order on Consent.

The following is a chronological enforcement history of this site.

Date	Index No.	Subject of Order
1/22/88	A701118704	IRM Order to implement groundwater remediation protocol.
3/90	A701118704	Amendment to Order providing for the discharge of water to the
		Oswego River from Municipal Well 2 and Kellar Well 2.
4/90	A702279004	RI/FS Consent Order
8/91	A702659106	IRM Consent Order to construct a municipal water treatment facility to
		treat impacted groundwater from the three municipal wells adjacent to
,		the site.

SECTION 4: SUMMARY OF SITE CHARACTERISTICS

In response to a determination that the presence of hazardous waste at the Site presents a significant threat to human health and the environment, a Remedial Investigation/Feasibility Study (RI/FS) has recently been completed.

4.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site.

The RI was completed in two phases. The first phase was completed between May 1990 and October 1993. The second phase was carried out between November 1993 and July 1994. A report entitled "Miller Brewing Company, Container Division, Remedial Investigation Report" dated July 1993 has been prepared describing the field activities and findings of the RI in detail. The RI activities consisted of the following:

- Installation of 114 monitoring wells to assess the extent and levels of groundwater contamination and characterize the aquifers.
- Three rounds of soil vapor surveys to identify potential source areas and define plume boundaries.
- A pump-test involving the three operating Fulton water supply wells adjacent to the site (Municipal Well 2, Kellar Well 2, and Kellar Well 1) in order to assess the effects of pumpage on contaminant migration and assess the aquifer characteristics.
- Test pits were excavated to visually and chemically assess soil contamination.
- A vacuum extraction (VE) pilot test was conducted to assess the effectiveness of VE as a remedial action.
- An additional pump-test was conducted to assess the effectiveness of the IRM at Recovery Well 1.

- A magnetometer survey was conducted in several areas of the site to determine if buried metal objects might be present at these locations.
- Hydraulic conductivity testing was conducted on all of the monitoring wells installed on and off site. Groundwater velocity estimates were also made.
- An investigation of process tanks located beneath the south corner of the plant was conducted.

To determine which media (soil, groundwater, etc.) are contaminated at levels of concern, the analytical data obtained from the RI were compared to environmental Standards, Criteria, and Guidance (SCGs, defined in Section 8.2 below). Groundwater SCGs identified for this site were based on NYSDEC Ambient Water Quality Standards and Guidance Values. For the evaluation and interpretation of soil analytical results, NYSDEC soil cleanup guidelines for the protection of groundwater, background conditions, and risk-based remediation criteria were used to develop remediation goals.

Based upon the results of the remedial investigation in comparison to the SCGs and potential public health and environmental exposure rates, certain areas and media of the site require remediation. These are summarized below. Complete information can be found in the RI Report.

Chemical concentrations are reported in parts per billion (ppb) and parts per million (ppm). For comparison purposes, SCGs are given for each medium.

4.2: Nature of Contamination

Across the site, in the various media, a large number of the class of compounds known as volatile organic compounds (VOCs) have been detected. Most prevalent, and found at the highest levels, are trichloroethane (TCA), tetrachloroethene (PCE), trichloroethene (TCE), dichloroethene (DCE), and dichloroethane (DCA). The last two of these compounds, DCA and DCE, are believed to be breakdown products of the original contaminants as well as components of the original spill. These compounds may occur when TCA, TCE, and PCE are acted upon by chemical and bacteriological processes in soil and groundwater which act to break them down by partially de-chlorinating the parent compound. Additional contaminants found at the site include benzene, toluene, ethylbenzene, and xylene (BTEX), and several ketones including methyl isobutyl ketone, methyl amyl ketone, and acetone.

4.3: Extent of Contamination

Contamination at the Miller site is found in wastes, soil, and groundwater. The wastes and soil contamination are found in the source areas which are located near the plant. The description of the source areas can be most effectively carried out by dividing the sources into two areas defined as follows. The northern unit includes the spill containment tank and north parking lot source area and the groundwater plume which extends from this source across the site to the municipal wells.

The southern unit encompasses the source beneath the south corner of the plant and the localized groundwater plume which extends from this source.

Northern Unit

Soil

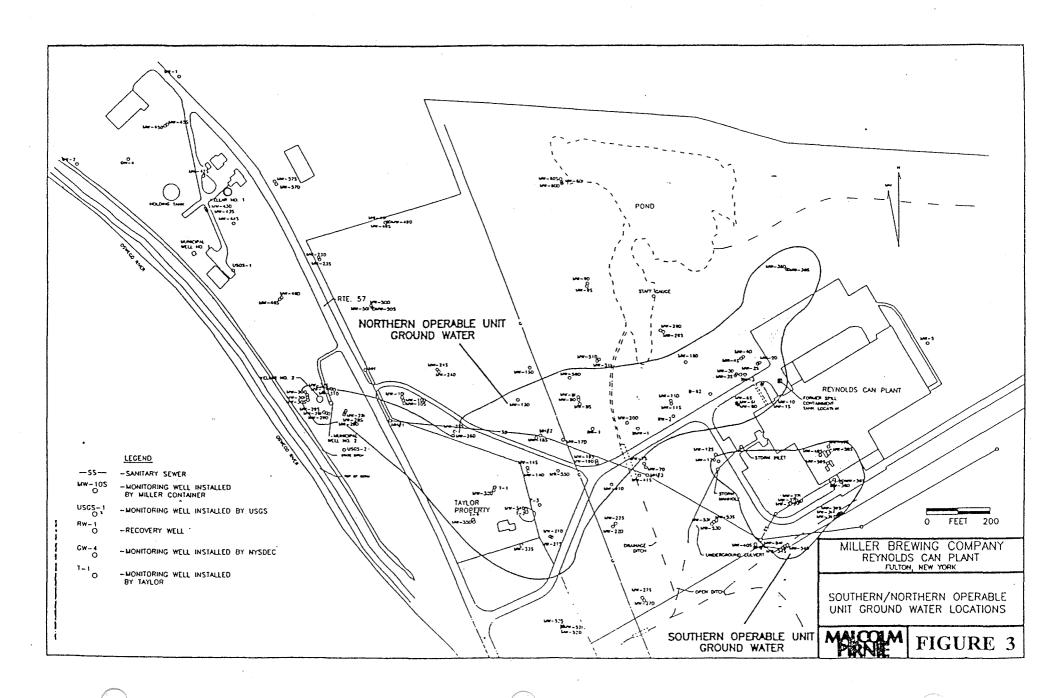
Soil contamination in this area is limited to the vicinity of the removed spill containment tank and the northwestern corner of the parking lot. The most commonly detected compounds and their respective range of concentrations (in ppb) are presented below. The soil clean-up values are based upon NYSDEC TAGM HWR-94-4046, "Determination of Soil Clean-up Objectives and Clean-up Levels".

	oncentration ange (pph)	Soil Clean-up Level (ppb)
Acetone	17-110	253
1,1-Dichloroethene	16	400
1,2-Dichloroethene	380	300
1,1,1-Trichloroethane	7-64	800
Tetrachloroethylene	7-380	2366
Methylene Chloride	7-16	100
Trichloroethylene	55	700
Toluene	210	1500
Xylenes	65-350	1200
Ethylbenzene	65	5500

Groundwater

Groundwater contamination extends in a well defined plume across the site from the northern source area (Figure 3). The following list indicates the highest levels of groundwater contamination found for each of the most common site contaminants. The SCG in the last column indicates the groundwater or drinking water standard. All values are in ppb.

Compound	Maximum Concentration	SCG
Methylene Chloride	4200	5
1,1-Dichloroethene	3200	5
1,1-Dichloroethane	1000	5
1,1,1-Trichloroethane	42000	5
Tetrachloroethylene	14000	5
c-1,2-Dichloroethene	690	. 5



The high concentration of contaminants in groundwater, relative to the detected soil contamination, raises a question regarding the source of groundwater contamination. One possible explanation is that there are undetected, isolated pockets of non-aqueous phase liquids in the subsurface near the source areas. Another possibility is that heavily contaminated soils which were removed during the tank excavation and removal had created high levels of groundwater contamination.

Surface Water

Surface water found at the site was sampled and found to contain no contaminants above the analytical detection limits. This surface water was collected from the on site pond.

Waste Materials

No discrete waste materials were found in the northern area. This source area consisted of contaminated soils which were removed when the spill containment tank and pipelines were removed.

Southern Unit

Soil

Soil contamination in this area is primarily located beneath the southwest corner of the plant. The contamination appears to be the result of solvent and lubricant releases from two process tanks. The following is a summary of the most commonly detected compounds and their respective concentration ranges.

	Concentration	Soil Clean-up
Compound	Range (ppb)	Level (pph)
		•
1,1-Dichloroethane	3-180	358
Acetone	22-81	263
1,1-Dichloroethene	5	777
1,2-Dichloroethene	750	383
1,1,1-Trichloroethane	17-7000	1816
Tetrachloroethylene	12-5700	4350
Methylene Chloride	8-700	251
Trichloroethylene	12-12000	1505
Benzene	800	139
Toluene	92-460	3585
Methyl Isobutyl		
Ketone	14-67	2270
Methyl Butyl Ketone	8-220	1673
Methyl Amyl Ketone	45-2900	-
4-Methyl-2-Pentanol	11	-
alpha-Pinene	20	; -
Phenanthrene	39	50000
2-Octanone	810	<u>.</u>
Methylene Chloride Trichloroethylene Benzene Toluene Methyl Isobutyl Ketone Methyl Butyl Ketone Methyl Amyl Ketone 4-Methyl-2-Pentanol alpha-Pinene Phenanthrene	8-700 12-12000 800 92-460 14-67 8-220 45-2900 11 20 39	251 1505 139 3585 2270 1673

Groundwater

Groundwater contamination from the Southern source area is confined to a limited area extending to the south-southwest of the plant (Figure 3). Values given below are maximum concentrations of the most commonly detected contaminants in the southern plume. The SCG in the last column indicates the groundwater or drinking water standard. All values are in ppb.

	Maximum	
Compound	Concentration (pph)	SCG_(pph)
Mathedaya Chinaida	2000	ب
Methylene Chloride	2800	5
1,1-Dichloroethene	1100	5
1,1-Dichloroethane	3000	5
1,1,1-Trichloroethane	11000	5
Trichloroethene	2000	5
Tetrachloroethene	1200	5
c-1,2-Dichloroethene	52000	5
1,2-Dichloroethane	14	5
Carbon Tetrachloride	410	5
Toluene	110	5
Ethylbenzene	150	5
Xylene	200	5
Acetone	5600	50
Methyl Isobutyl Ketone	2400	50
Methyl Ethyl Ketone	25	50

Surface Water

There was no surface water in the Southern area of the site.

Waste Materials

Waste material found in the Southern source area consists of free oil found below the plant structure. The following table lists concentrations of the most commonly detected contaminants which were found in oil that flowed into excavations in the southern area. For comparison purposes, analytical results from oil contaminated soils from the excavation are also provided. Values are in ppb.

Compound	Stained Soil (ppb)	Waste Oils (pph)	
1,1-Dichloroethane c-1,2-Dichloroethene Tetrachloroethene Trichloroethane Trichloroethene	3-180 750 12-5700 17-7000 12-12000	1000-218000 5000-350000 8500-1140000 20000-2070000 7500-130000	
Methylene Chloride	8-700	1500-75000	

Xylene -	÷ ′	790-120000
Benzene	800	-
Toluene	92-460	1200-98000
Acetone	22-81	525000
Methyl Isobutyl Ketone	14-67	-
Methyl Butyl Ketone	8-220	••
Methyl Amyl Ketone	45-2900	-

4.4: Interim Remedial Measures

Interim Remedial Measures (IRMs) are conducted at sites when a source of contamination or an exposure pathway can be effectively addressed before completion of the RI/FS.

Miller initiated an IRM early in 1991 which consisted of the construction of a treatment system for the three municipal wells adjacent to the Miller site. The system was designed to take the production from Municipal Well 2, Kellar Well 2, and Kellar Well 1 and process the water through a packed column air stripper to remove the volatile organic compounds which had been detected in all three wells. Miller signed a Consent Order with the State which committed them to the construction of a system which would reduce the level of site specific contaminants to non-detectable levels (defined as less than 0.5 ppb). The water would then be routed into the Fulton municipal water supply system. The terms of the Order also required the installation of a vapor phase carbon unit to filter the air emissions from the stripper.

The facility was constructed on City of Fulton property adjacent to the three wells and the waterworks buildings. The system began operations on June 10, 1992 and after a 15 day demonstration period, the system was officially put into operation. Since that time (June 25, 1992), the system has been treating the production of the well field with only brief interruptions to make adjustments and improvements to the system.

Under the terms of Consent Order #A702659106, Miller is committed to pay for various incremental costs incurred by the operation of the treatment facility. Miller's commitment will continue, as specified in the Consent Order, until such time that the aquifer is remediated or it is determined that the contamination impacting all three water supply wells is not the responsibility of Miller. The Consent Order presents the specifics of Miller's obligations, this paragraph being a brief description of those obligations.

SECTION 5.0: SUMMARY OF SITE RISKS

5.1: Summary of Human Exposure Pathways:

An exposure pathway is the process by which an individual is exposed to a contaminant. The five elements of an exposure pathway are 1) the source of contamination; 2) the environmental media (e.g., soil, groundwater) and transport mechanisms; 3) the point of exposure; 4) the route of

exposure (e.g., ingestion, inhalation); and 5) the receptor population. These elements of an exposure pathway may be based on past, present, or future events.

Completed pathways known to or that may exist at the site include:

- Ingestion of contaminated groundwater from the impacted municipal wells was a potential pathway. As noted below, the contaminated wells were taken out of service before contamination could be detected in the distribution system. These wells were returned to service after the completion of the municipal water treatment system. Since this system began full operation all contaminants in the discharge have been below detection limits, as required in the consent order. The water treatment system, therefore, eliminates this pathway.
- ingestion of contaminated soil in the northern source area is a possible exposure pathway for workers at the plant; and,
- dermal contact with northern contaminated soils is a possible exposure pathway for workers at the plant.

Contact with contaminated soil would not impact the community since the contamination is limited to the plant site. Monitoring of the public water supply did not indicate the presence of contamination from the site in the water distribution system. The contaminated wells were taken out of service as soon as drinking water standards were exceeded. As discussed above, these wells were returned to service upon completion of the treatment system. A more detailed discussion of the health risks can be found in Section 6.0 of the RI Report.

5.2: Summary of Environmental Exposure Pathways:

There have been no completed pathways identified for wildlife exposure to site contaminants. The on site pond would have been a potential contact point for wildlife to come into contact with site contamination, but sampling conducted from the pond has indicated that no contaminant migration to surface water has occurred.

SECTION 6.0: REMEDIATION GOALS

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR 375-1.10. These goals are established under the overall goal of protecting human health and the environment and meeting all Standards, Criteria, and Guidance (SCGs).

At a minimum, the remedy selected should eliminate or mitigate all significant threats to public health and the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

The goals selected for this site are:

- Eliminate to the extent practicable the contamination present within the on-site soils/waste (reduce soil contaminant levels to levels protective of groundwater as indicated in soil tables in Section 4.3).
- Eliminate the potential for direct human or animal contact with the contaminated soils on-site.
- Mitigate the impacts of contaminated groundwater to the environment.
- Prevent, to the extent practicable, migration of contaminants in the source areas to groundwater.
- To the extent practicable, provide for attainment of SCGs for groundwater quality at the limits of the area of concern (AOC). The AOC for the site is the area from the spill source locations to the Fulton municipal well field.

SECTION 7.0: DESCRIPTION OF THE REMEDIAL ALTERNATIVES

Potential remedial alternatives for the Miller Container Division site were identified, screened and evaluated in a Feasibility Study. This evaluation is presented in the report entitled "Feasibility Study Report, Reynolds Can Plant Site" (former Miller Container Plant), dated September 1994. A summary of the detailed analysis follows. The following alternatives address contamination associated with both the northern and southern units.

Alternative 1: No Further Action

Present Worth (30 yrs @ 8%):	\$ 1,129,522
Capital Cost:	\$ 15,000
Annual O&M:	\$ 99,000
Time to Construct:	2-3 months

The above costs do not include the capital or O&M costs of the IRM incurred to date. The capital cost of \$15,000 is for maintenance of existing recovery wells. The annual O&M of \$99,000 does not include O&M of the municipal water treatment system.

The no further action alternative recognizes the remediation of the site completed under the previously completed IRM. It requires continued maintenance and monitoring only, to evaluate the effectiveness of the remediation completed under the IRM. The costs are for continued monitoring.

This is an unacceptable alternative as the site would remain in its present condition and the threat presented by contaminated soils and groundwater would remain.

Alternative 2: Groundwater Extraction + Central Treatment + Direct Discharge + Vapor Extraction + Monitoring

 Present Worth (30 yrs @ 8%):
 \$ 5,985,502

 Capital Cost:
 \$ 1,502,400

 Annual O&M:
 \$ 394,200

 Time to Construct:
 6 months - 1 year

Alternative 2 (Alternative 1 of the Feasibility Study Report), consists of the installation of 10 groundwater extraction wells to supplement the three existing wells which were part of the 1988 IRM. These wells would be located in such a way that they would contain and collect contaminated groundwater from the northern and southern source areas (Figure 4). A vapor extraction system would be installed in the southern source area to remediate contaminated soils located beneath the south corner of the plant.

Water from the extraction wells would be piped to a central treatment system where it would pass through an air stripper which would remove the volatile contaminants from the water. Approximately 162,000 gallons per day would be collected and treated by the proposed remedy. The discharge water would then be directed through a carbon bed filter to remove any residual contamination. The water would then be discharged to surface water. The air discharge would pass through a vapor phase carbon filter to remove the volatile contaminants from the air stream. Water collected from the two wells inside the southern source area would be further treated by being passed through an oil/water separator prior to air stripping.

The vapor extraction system would consist of a minimum of two vapor extraction wells located in the southern source area. Vapor from these wells would be passed through a carbon adsorption system for volatile contaminant treatment prior to discharge.

Alternative 2 would also consist of continued water level and chemical monitoring to assess the effectiveness of the system.

Alternative 3: Groundwater Extraction + Central Treatment + Direct Discharge + Reapplication + Soil Flushing + Monitoring

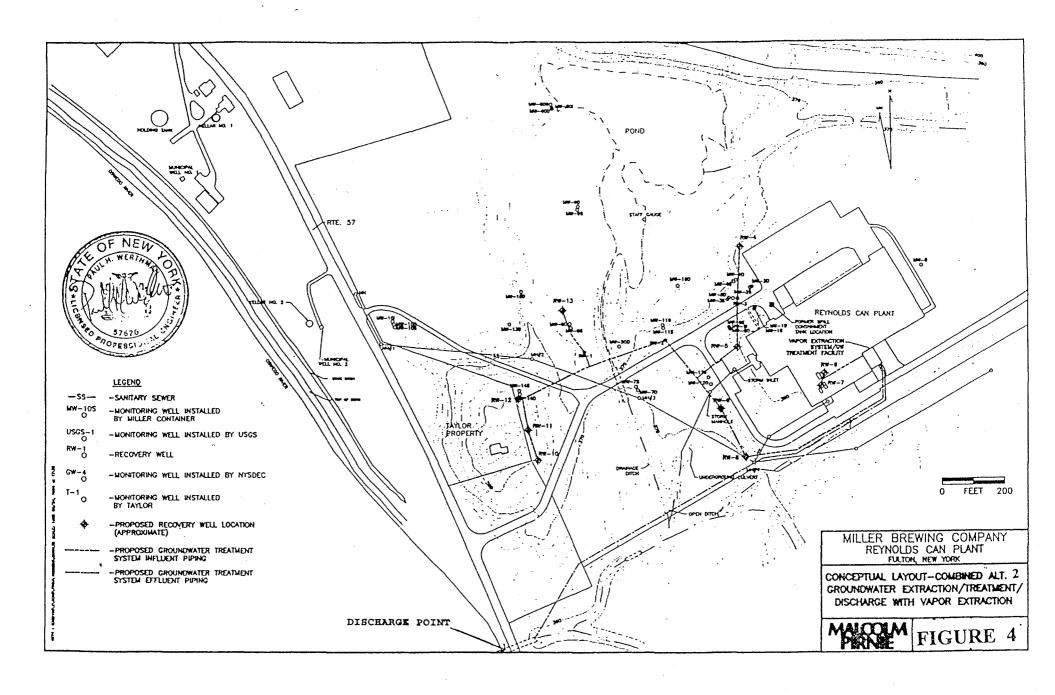
 Present Worth (30 yrs @ 8%):
 \$ 5,942,864

 Capital Cost:
 \$ 1,471,900

 Annual O&M:
 \$ 402,500

 Time to Construct:
 6 months - 1 year

Alternative 3 (FS Report Alternative 2), differs from Alternative 2 in that it does not include vapor extraction. Instead soils in the southern source area would be treated by the application of treated groundwater to flush contaminants from the soils.



Soil flushing would be conducted by introducing treated water to the area of the collection tanks under the south corner of the plant. This alternative would require pilot testing to determine its effectiveness.

Alternative 4: Groundwater Extraction + Central Treatment + Direct Discharge + Reapplication + Bioremediation + Monitoring

 Present Worth (30 yrs @ 8%):
 \$ 6,248,835

 Capital Cost:
 \$ 1,553,300

 Annual O&M:
 \$ 494,200

 Time to Construct:
 12 months - 18 months

Alternative 4 (FS Report Alternative 3), is similar to Alternative 3 with the addition of bioremediation to the remedy for the southern source area.

As with Alternative 3, a portion of the water treated by air stripping would be reapplied to the southern source soils. In Alternative 4, the water would be further treated with nutrients and microorganisms, if needed, to enhance the biological activity in the contaminated soils. This remedy would require extensive pilot testing.

Alternative 5: Groundwater Extraction + Central Treatment + Direct Discharge + Air Sparging + Vapor Extraction + Monitoring

Present Worth (30 yrs @ 8%):	\$ 7,062,065
Capital Cost:	\$ 2,081,400
Annual O&M:	\$ 672,300
Time to Construct:	12 months - 18 months

Alternative 5 (FS Report Alternative 4), is similar to Alternative 2, with the addition of two air sparging systems.

Air sparging is the process by which air or some other gas is introduced below the water table by means of vertical or horizontal wells. The air bubbling up through the contaminated groundwater strips a portion of the volatile contaminants from the groundwater.

This alternative would involve the installation of one sparging system in the southern source area and one in the northern source area. Each system would consist of a horizontal sparging well below the water table and a horizontal vapor recovery well above the water table. Pilot testing would be required to verify the effectiveness of this technology at the site.

SECTION 8.0: SUMMARY OF THE COMPARATIVE ANALYSIS OF THE ALTERNATIVES

The criteria used to compare the potential remedial alternatives are defined in the regulation that directs the remediation of inactive hazardous waste sites in New York State (6 NYCRR Part 375). For each criterion, a brief description is provided followed by an evaluation of the alternatives against that criterion. A detailed discussion of the evaluation criteria and comparative analysis is contained in the Feasibility Study.

The first two evaluation criteria are termed threshold criteria and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of the health and environmental impacts to assess whether each alternative is protective.

Alternative 1 would not be protective of human health and the environment because it would do nothing to control the contamination in the southern source area. It would also rely upon the existing, three well recovery system which has not been completely successful in containing the northern plume.

Alternatives 2-5 would be expected to be protective of human health and the environment. Each of these alternatives would reduce risk through the restriction of contaminant migration in groundwater. Each would protect groundwater and mitigate the direct contact threat by removing the southern source soil contamination through vapor extraction.

The groundwater collection and treatment aspects of Alternatives 2-5, would combine a control/isolation remedy with a permanent separation/treatment remedy. While it is anticipated that the groundwater RAOs would not be met for 20-30 years, there is a high degree of confidence that the groundwater collection system would contain the northern and southern plumes. Any residual contamination currently beyond the reach of the collection system would not pose a threat to human health because of the treatment system currently in place at the municipal well field. It is anticipated that the soil remedial alternatives would take between 1 and 5 years to achieve the RAOs for soil.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance.

The main SCGs for this site are:

- Chemical-Specific
 - a) NYS Groundwater standards
 - b) NYS Soil Clean-up Levels (TAGM 4046, 1/24/94)
 - c) NYSDOH Drinking water standards (10 NYCRR Part 5)

- Action-Specific
 - a) SPDES discharge requirements
 - b) Sewer use requirements
 - c) Air discharge requirements
 - d)Hazardous waste management requirements.

Alternative 1 would meet action-specific SCGs. The system currently operates in accordance with the listed SCGs. Chemical-specific SCGs would not be met because it is not reasonable to believe that the current recovery wells would significantly improve groundwater quality in the southern source area.

Alternatives 2-5 would meet the identified SCGs. The groundwater treatment system common to these four alternatives would eventually cause groundwater quality to approach or meet standards. Each of the soil treatment alternatives would result in the attainment of soil clean-up goals. Alternatives 2 and 5, which involve vapor extraction, provide a higher degree of confidence since a pilot study has already been conducted to assess the effectiveness of this technology. Each of these alternatives would be required to meet mandated action-specific SCGs by meeting requirements for surface water, sewer, and/or air discharges.

The next five "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Short-term Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared with the other alternatives.

For Alternatives 2-5, short-term risk to on-site workers and the community would be due to fugitive dust emissions during the installation of the required wells and during remediation. These risks would be minimized through monitoring and the use of appropriate protective equipment by all on-site workers. In addition, any risk posed during operation of the treatment system would be easily controlled through proper system operation, maintenance, and monitoring. A health and safety plan would be developed prior to the implementation of any alternative.

Alternative 1 would not result in any increased risk to human health and the environment in the southern source area. Any risks posed to on-site workers during recovery well maintenance or replacement in the northern area would be minimal and easily controlled.

The period of time required for groundwater treatment under Alternatives 2, 3, and 4 would be similar; about 30 years, however, soil remedial goals would be expected to be met sooner with vapor extraction (Alt. 2), about one year, than with soil flushing or bioremediation (Alts. 3 or 4), 3-5 years. This is based upon the relative effectiveness of each technology on the contaminants present below the plant. Although pilot testing has not been conducted to determine the

effectiveness of air sparging (Alt. 5) at the site, the time required to achieve groundwater goals may be 10 years less than that of the other alternatives.

4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of alternatives after implementation of the response actions. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the controls intended to limit the risk, and 3) the reliability of these controls.

Alternatives 2-5 would involve on-site treatment. The groundwater pump and treat technology common to the four alternatives would be considered a permanent remedy because, in addition to the on site treatment of contaminated groundwater, it would also be effective in containing the plumes. The soil remedial technologies and air sparging are assumed to by effective; however, soil flushing, bioremediation, and air sparging have not been demonstrated for the site. Initial testing would be required to determine the applicability of these technologies. Initial testing would include the performance of bench and pilot tests. If proven effective, the soil treatment technologies would provide for permanent treatment of contamination present in the soil beneath the southern end of the plant.

Although remedial-action objectives for the southern area soil would be met within a relatively short time frame by implementing any of Alternatives 2-5 (1-5 years), groundwater pump and treat would most likely be required for a period of 20-30 years before groundwater objectives are met. For soil remediation, vapor extraction (Alt. 2), would require an estimated one year to achieve RAOs. Soil flushing (Alt. 3) and the bioremediation/flushing combination (Alt. 4), would achieve RAOs in 5 years and 3 years, respectively. Provided remedial objectives are eventually met for groundwater, little contamination would be left at the site and little to no long-term operation, maintenance, and monitoring would be required. Limited sampling of the soil beneath the plant as well as site groundwater would be required to confirm that remedial-action objectives were met.

Under Alternative 1 (No Further Action), little treatment of the contaminated media at the site would occur. Thus, contamination would remain on-site, and the continued existence of the contaminant source in the southern area would mean the risk of future contaminant releases to groundwater. This alternative would not be effective in reducing contamination at the site and would not be permanent. Off-site treatment at the municipal wells would continue indefinitely.

5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternatives 2-5 incorporate elements of destruction (bioremediation), treatment, and control and isolation technologies. Implementation of these alternatives would provide for a reduction in contaminant toxicity, mobility, and volume at the site.

For addressing contaminated groundwater, Alternatives 2-5 are basically the same. All would provide for the irreversible treatment of contaminated groundwater at the site. Alternative 5, which includes air sparging, would be expected to achieve RAOs for groundwater in a shorter time frame. The goal of the groundwater remediation would be the treatment of site groundwater until groundwater standards were met. Only a small portion of the downgradient plume would escape treatment and the risk posed by this would be mitigated by the municipal treatment system. The treatment residuals would consist of spent (contaminated) carbon from the groundwater polishing system and vapor phase carbon unit. These residuals would be managed through off site carbon regeneration.

For source area soil treatment, Alternatives 2-5 would be expected to significantly reduce the toxicity, mobility, and volume of the soil contamination. The three technologies, vapor extraction (Alt. 2 and 5), soil flushing (Alt. 3), and bioremediation (Alt. 4), would provide for irreversible treatment of soil contamination. Vapor extraction would provide the highest level of confidence that all the contaminated soil would be treated and offers the highest reliability, since a pilot test of this technology has already been conducted. Bioremediation and soil flushing would provide a lower level of confidence regarding the volume of contaminated media treated. Levels of contamination would be reduced, but the area affected by the bioremediation and soil flushing treatment might not encompass the entire contaminated soil volume.

Alternative 1 would only slightly reduce the mobility and volume of contamination present in the northern area groundwater. Contaminant toxicity, mobility, or volume would not be reduced in the southern area.

6. Implementability. The technical and administrative feasibility of implementing each alternative is evaluated. Technically, this includes the difficulties associated with the construction, the reliability of the technology, and the ability to monitor the effectiveness of the remedy. Administratively, the availability of the necessary personnel and equipment is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.

Alternative 1 would be the most easily implemented alternative but would not meet the remedial goals for the site.

For groundwater treatment, Alternatives 2-4 pose the same implementation difficulties. Requirements would have to be met for discharge of treated water. Requirements for the air discharge may also be involved. No serious difficulties in the acquisition of needed hardware would be anticipated. Installation of recovery wells, pipelines to convey the water to the treatment facility, construction of the building to house the treatment system, construction of the air stripper, and the pipelines to convey water to the discharge point, would all pose some construction difficulties. None of these are expected to be outside the realm of normal engineering and construction problems and should be easily managed. Alternative 5, which in addition to the steps in Alternatives 2-4, incorporates air sparging, would be the most difficult alternative to implement due to the additional construction required. Pilot testing would be required to design an appropriate system. Additional controls would be needed to collect the volatiles removed from

groundwater. Air sparging would necessitate the installation of sparging wells below the water table paired with vapor collection wells above the water table. The complexity of the subsurface stratigraphy at this site makes the implementation of this alternative problematic. This alternative would, if all the difficulties were overcome, be expected to achieve groundwater RAOs somewhat more quickly than the other alternatives and no future remedial actions would be anticipated.

Alternative 2, which includes vapor extraction treatment of the southern source area soils, would require the installation of vacuum piezometers in the vicinity of the plant waste water treatment facility to measure the effectiveness of the system. However, use of two of the existing monitoring wells/recovery wells as vacuum wells would limit the intrusive activities performed in the area. Vapor extraction has been shown to be a proven and reliable technology, and results of the pilot test conducted in the southern area indicated that it would be an effective technology at the site. Few administrative problems would be expected.

Alternatives 3 and 4, which include soil flushing and bioremediation, respectively, would be slightly more difficult to implement. Pilot testing would be required to prove their effectiveness. In addition, some future remedial actions may be necessary if access to all contaminated soils cannot be gained by water flushing through the area and the soil continues to be a source of groundwater contamination. Administratively, both of these remedies may pose some problems. Each requires the reintroduction of treated water to the areas of soil contamination. This is effectively a reinjection process and appropriate approvals may be required.

7. Cost. Capital and operation and maintenance costs are estimated for each alternative and compared on a present worth basis. Although cost is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, cost effectiveness can be used as the basis for the final decision. The costs for each alternative are:

Alt.	C	apital Cost	A	nnual O&N	4	Total
I.	\$	15,000	\$	99,000		\$1,129,522
Π.	\$	1,502,400	\$	394,200		\$5,985,502
III.	\$	1,471,900	\$	402,500		\$5,942,864
IV.	\$	1,553,300	\$	494,200		\$6,248,835
V.	\$	2,081,400	\$	672,300		\$7,062,065

This final criterion is considered a modifying criterion and is considered after evaluating those above. It is focused upon after public comments on the Proposed Remedial Action Plan have been received.

8. Community Acceptance - Concerns of the community regarding the RI/FS reports and the Proposed Remedial Action Plan have been evaluated. A "Responsiveness Summary" has been prepared that describes public comments received and how the Department will address the concerns raised. The Responsiveness Summary is included as Appendix A.

SECTION 9.0: SELECTED REMEDY

Based upon the results of the RI/FS, and the evaluation presented in Section 8, the NYSDEC has selected Alternative 2 as the remedy for this site.

This selection is based upon the conclusion that this alternative will meet all of the remedial goals for the site and will best achieve the threshold and balancing criteria as described above. The alternative will be protective of human health and the environment by containing and collecting the groundwater plume in both the northern and southern areas of the site. The alternative will meet SCGs through groundwater treatment and soil treatment, and will meet appropriate discharge criteria. This alternative will have limited and manageable risks associated with construction and will in the long-term reduce contamination in the impacted media at the site. It will further be readily implemented and with regard to vapor extraction, pilot testing has verified technical feasibility. While this alternative will be slightly more costly than Alternative 3 it will be more readily implemented and effective.

The estimated present worth cost to carry out the remedy is \$5,985,502. The cost to construct the remedy is estimated to be \$1,502,400 and the estimated average annual operation and maintenance cost for 30 years is \$394,200.

The elements of the selected remedy are as follows:

- 1. A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. Uncertainties identified during the RI/FS will be resolved.
- 2. a groundwater collection system consisting of approximately 13 recovery wells located such that they will intercept and contain the contaminant plumes;
- 3. a groundwater treatment system which will reduce contamination in the collected water to levels acceptable for surface discharge;
- 4. a vapor extraction system to reduce soil contamination in the southern source area to levels protective of groundwater;
- 5. monitoring of the vapor extraction area of influence sufficient to assess the effectiveness of the system;
- 6. monitoring of groundwater levels to assess the range of the influence of the recovery wells; and,
- 7. appropriate groundwater collection and analysis to assess the effectiveness of the groundwater collection and treatment systems, including a comprehensive round of groundwater sampling

and analysis to establish baseline conditions prior to the implementation of the preferred alternative.

8. the continued operation of the public water treatment facility as necessary is an integral part of the selected remedy.

SECTION 10.0: HIGHLIGHTS OF CITIZEN PARTICIPATION

Citizen Participation (CP) Activities were implemented to provide concerned citizens and organizations with opportunities to learn about and comment upon the investigations and studies pertaining to the Former Miller Container Site. All major reports were placed in a document repository in the vicinity of the site and made available for public review. A public contact list was developed and used to distribute fact sheets and meeting announcements.

The following is a brief chronology of some of the citizen participation and informational activities conducted by the Department and the NYS DOH:

1987 The NYSDEC held a public meeting to discuss the groundwater treatment system.

1990 The State participated in a public meeting sponsored by the City of Fulton to update citizens on the site.

The State participated in a public meeting sponsored by FSDWAC to update citizens on the site.

As provided for in the Oswego County Municipal Health Services Plan, the State assisted the Mayor of Fulton in setting up the Fulton Water Supply Panel. The purpose of the Panel was to provide citizens with an opportunity to have input into the activities associated with the Miller Brewing Company - Container Division spills. The State participated in public meetings on August 10, September 5, September 19, October 10, October 24 and November 7, 1990.

The State set up a local document repository for this site. The repository is located at the Fulton Public Library. Project documents are placed in the repository for review by the public. Documents in the repository include the Remedial Investigation/Feasibility Study, analytical data, consent orders, and other project information.

Because of the volume of analytical data and information, efforts were made to update the repository. Since then the repository has been updated regularly. Additional copies of the analytical data were given to FSDWAC. The mayor and the water operator of Fulton, the NYS DOH and the Oswego County Health Department are routinely provided copies of the analytical data.

A Citizen Participation plan was prepared.

The NYSDOH and the City of Fulton put legal notices in the local newspapers on two separate occasions, the first time to notify residents when Municipal Well #2 was taken offline, and the second time to notify residents when Kellar Well #2 was taken offline.

1991 The State participated in the Fulton Water Supply Panel meetings held on January 30, February 20, March 27, May 30 and December 19, 1991. In between meetings, the NYSDEC provided updates on the site activities to the Fulton Safe Water Panel.

The NYSDEC put out a press release discussing the discovery of another area of contamination on Miller's property

The NYSDEC put out a press release announcing that a consent order for the site had been signed.

1992 The State participated in a Fulton Water Supply Panel meeting held on February 7, 1992.

The NYSDEC and the NYS DOH sent the public two fact sheets, one in July and one in August, discussing the status of site-related activities.

On October 20, the NYSDEC and the NYSDOH met with citizens to discuss concerns they had about inactive hazardous waste sites in the Fulton area. Miller Brewing was one of the sites discussed.

- 1993 As follow-up to the 1992 citizen meeting, in April the State met with this group to continue discussions about some inactive hazardous waste sites in the Fulton area. Miller was again one of the sites discussed.
- 1994 NYSDEC held a public meeting to discuss with the public the proposed remedial action plan for the site. Prior to the public meeting, a fact sheet/meeting announcement was sent to the mailing list.
- 1995 A responsiveness summary was prepared in response to comments received on the proposed remedial action plan. This document will be mailed to the people who commented on the plan and it will be placed in the document repository with the Record of Decision.

On December 7, 1994, a public meeting was held at the Fulton City Hall, Fulton, New York to describe the Proposed Remedial Action Plan. Prior to the meeting, an invitation/fact sheet was mailed to those persons on the contact list. The public comment period extended from November 28, 1994 until February 1, 1995. Comments received regarding the Proposed Remedial Action Plan have been addressed and are documented in the Responsiveness Summary (Appendix A).

APPENDIX A RESPONSIVENESS SUMMARY

Former Miller Container Site
Oswego County
7-38-029

This document summarizes the comments and questions received by the New York State Department of Environmental Conservation (NYSDEC) regarding the Proposed Remedial Action Plan (PRAP) for the subject site. A public comment period was held between November 28, 1994 and February 1, 1995 to receive comments on the proposal. A public meeting was held on December 7, 1994 at the City Hall in Fulton, New York to present the results of the investigations performed at the site and to describe the PRAP. The information below summarizes the comments and questions received and the Department's responses to those comments.

DESCRIPTION OF THE SELECTED REMEDY

The selected remedy is the same as was proposed in the PRAP. The major elements of the selected remedy include:

- o A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. Uncertainties identified during the RI/FS will be resolved.
- o A groundwater collection and treatment system consisting of 13 recovery wells connected to a treatment area located adjacent to the existing main building.
- o Soil vapor extraction to remove contaminants in the southern source area to levels that are protective of groundwater.
- o Monitoring the different elements of the remedy to determine its effectiveness and identify changes necessary to achieve the remedial objectives for the site.
- o Continued operation of the public water treatment system as necessary to prevent the entry of site related contaminants into the public water system.

The information given below is summarized from the December 7, 1994 public meeting and letters received during the comment period. The issues raised have been grouped into the following categories:

- I. Questions/Comments Raised During the Public Meeting
 - A. Issues Regarding the Remedy
 - B. Issues Regarding Communications and Responsiveness
 - C. Issues Regarding Other Alternatives

- D. Issues Regarding Site Conditions/History/Investigations
- II. Letters Received During the Comment Period
 - E. Letter dated 1/25/95
 - F. Letter dated 1/26/95
 - G. Letter dated 1/23/95
 - H. Letter dated 1/5/95
 - I. Letter dated 12/21/94
 - J. Letter dated 12/7/94
- I. QUESTIONS/COMMENTS RAISED DURING THE PUBLIC MEETING
- A. Issues Regarding the Remedy
- A.1 Issue: The City of Fulton is very concerned about the possibility of negative impacts on the public water supply due to site contamination. This concern includes both quality and quantity issues. Although the proposed remedy seems to adequately address the quality issues by continuing the operation of the municipal water treatment system, the proposal does not adequately address the possible impacts of the remedy on the quantity of water available to the municipal well-field. Will operation of the remedy take water away from the system?

Response: An examination and analysis of aquifer characteristics was conducted in the area of the municipal wells, M2 and K2. Using conservative assumptions, it was estimated that the pumping of wells in the selected remedy would result in a decrease of less than two tenths of one percent (0.2%) of the water currently available to M2 and K2. This estimate was made assuming that there would be no increase in water flow from other directions which would tend to reduce the loss of production even further.

A.2 Issue: If operation of the remedy will reduce the amount of water available to the public water supply, the City of Fulton expects to be compensated for the loss of water.

Response: As indicated in the response in A.1, no measurable loss in production is expected. Also, the contingency exists to supplement the water supply of the city with water from the Onondaga County Water Authority (OCWA).

A.3 Issue: Will the treatment of groundwater be similar to the system used to treat municipal water?

Response: The system will be very similar to that being used to treat municipal water. The system will have several additional steps including an oil water separator and activated carbon to remove contaminants which are not readily removed through air stripping.

A.4 Issue: Will the potential loading of contaminants to the Oswego river be calculated?

Response: Before any discharge to the river is permitted, loading to the river will be calculated and any potential impacts assessed.

A.5 Issue: How long will it take to complete the cleanup?

Response: The duration of the clean-up is not easily determined. Many variables come into play which will alter the rate of remediation. The initial goal of the remedy, which is to cut off the migration of contaminated groundwater to the municipal wells, should be achieved in the first year of the system's operation.

A.6 Issue: If water in the municipal system is being treated until contaminants are not detected, why won't recovered groundwater also be treated to the non-detectable level?

Response: The water which is treated at the municipal treatment facility, while contaminated to levels exceeding groundwater standards, is relatively mildly contaminated. Much of the water to be handled by the selected remedy is contaminated to much higher levels. Contamination in the source areas is 100 to 1,000 times greater than that found in the area of the municipal wellfield. While the treatment system may preform at the same level of efficiency as the drinking water treatment system it may not result in non-detectable levels in the processed water. The system will be designed so that treatment capabilities will ensure that discharge criteria are met.

A.7 Issue: Why doesn't the remedy include the treatment of soils in the northern areas?

Response: Investigation of the soils at various depths in the northern area did not encounter soil contamination at levels exceeding NYSDEC Soil Cleanup Criteria. These criteria are, at the least, designed to be protective of groundwater.

A.8 Issue: Will additional air strippers be needed to implement the remedy?

Response: Yes, a separate air stripping facility will be designed to meet the requirements of the selected remedy.

A.9 Issue: Will the discharge of treated groundwater to the sanitary sewer stop?

Response: Yes, once the selected remedy is implemented the discharge to the sewer will stop. The output from the three existing recovery wells will be manifolded with the ten additional wells to be installed.

A.10 Issue: What will happen to the activated carbon used in the water treatment system?

Response: Activated carbon used in this system will be reprocessed. This will be done either on site or at an off site facility.

A.11 Issue: We are concerned about the proposal to discharge treated groundwater to the Oswego River. Since the river recharges the municipal wellfield, we are concerned that releasing potentially contaminated water to the river upstream of the wellfield could threaten the water quality in the wellfield.

Response: The permit levels calculated for discharge to the river will take into account the volumes discharged, contaminant types, and the ability of the river to dilute such discharges. The contaminant levels in the river would be compatible with current use. Also, the municipal water supply treatment system has more than adequate capability to treat minor fluctuations in influent water quality.

B. Issues Regarding Communications and Responsiveness

B.1 Issue: There has not been adequate communication with representatives from the Town of Volney. It should not be necessary to go the library to review the documents. Although the City of Fulton is receiving attention, the Town where the site is located is not being given adequate consideration.

Response: To address this concern, project documents (Remedial Investigation and Feasibility Study Reports) as well as future documents and information sheets have been, and will be provided to the Town of Volley administration and will be available to the public.

B.2 Issue: The City of Fulton requests an extension of the comment period so that they can more thoroughly review the proposal.

Response: The extension to January 17th and subsequently to February 1st was granted in an effort to accommodate the needs of the city and the general public.

B.3 Issue: Finding the documents in the repository was difficult and it appears that some documents are missing.

Response: An effort will be made to assess the completeness of the file at the document repository.

B.4 Issue: It was difficult to wade through the RI/FS reports to figure out what is happening at the site and what the proposed remedy is.

Response: In conjunction with the inventory of documents in the repository the Department will make sure that documents such as the PRAP, which is available, and any future documents which clearly summarize the selected remedy, are at the repository.

C. Issues Regarding Other Alternatives

C.1 Issue: Was the reapplication of treated groundwater to the aquifer considered when evaluating remedial alternatives?

Response: Reapplication and reinjection of treated water were considered in the evaluation of alternatives. This approach was screened out for several reasons including the physical characteristics of the unsaturated and saturated soils at the site. An additional complicating factor was the proximity of the municipal well field which made the potential for mobilizing existing contamination more problematic than it otherwise would have been.

C.2 Issue: Did the feasibility study evaluate steps that could be taken to search for DNAPLs?

Response: The deep wells installed during the Remedial Investigation were designed to detect both dissolved contamination and DNAPLs in and around the source areas. Despite the number of wells installed, no DNAPLs were encountered.

C.3 Issue: Were alternatives to treating groundwater by air stripping considered?

Response: Yes. Among the alternatives considered were, biological treatment (aerobic and anaerobic), physical treatment (steam stripping, distillation, carbon adsorption, ion exchange, oil-water separation, coagulation/flocculation), and chemical treatment (precipitation, oxidation, membrane assisted solvent extraction). In the final analysis, the combination of air stripping, oil-water separation, and carbon adsorption were found to best address the contaminant types and concentrations, and the treatment rates required for this site.

D. Issues Regarding Site Conditions/History/Investigations

D.1 Issue: How does the Taylor property fit into the problems at the site?

Response: The Taylor property is located on small rise along Route 59 slightly south of and across from, municipal wells M2 and K2. As part of the RI, the Taylor property and the surrounding area were investigated. Early in the process a septic tank was excavated from the Taylor property leading to some speculation that the well field contamination may have come from there. Later investigation and analysis led to the conclusion that since the most significant contamination levels were detected upgradient from the current Taylor property that it was not the source for this contamination.

D.2 Issue: Where did the contamination at the Taylor property come from?

Response: Most of the contamination detected in wells at Taylor is probably the result of contaminated groundwater from the larger plume extending across the site.

D.3 Issue: Was any contaminated soil removed from the Taylor property?

Response: In 1989 two underground storage tanks and the soil surrounding them were excavated and removed from the Taylor Property. One of these tanks contained fuel oil the other gasoline.

D.4 Issue: Was there a release of petroleum at the Taylor property?

Response: Some petroleum was found in the soil removed during the tank excavation. This soil was analyzed and disposed of off site. Petroleum related contaminants have not been found in the groundwater or in the nearby public water supply wells.

D.5 Issue: What caused the contamination of soils in the northern area?

Response: There are two sources of contamination in the northern area. One is the former spill containment tank which was removed along with the surrounding contaminated soil in 1986. The other northern source area was the result of the washing and storage of empty VOC drums in the area of the northern corner of the parking lot.

D.6 Issue: Since the process began, how much water has been discharged to the sewer?

Response: Using the maximum average flow rate from the recovery wells and allowing for only 10% down time, approximately 32,000,000 gallons of water have been discharged to the sewer. This is a very conservative estimate since over the nearly seven years of operation the wells have, at various times, been shut down for testing, repairs, and/or regular maintenance.

D.7 Issue: Since startup of the IRMs, how many pounds of contaminants have been released to the air?

Response: This information is not available. The Department is available to describe to the commentor what assumptions would be necessary to make such an estimate.

D.8 Issue: Does the air permit for the existing air strippers cover all contaminants in the groundwater?

Response: The air stripper permit takes into account all of the contaminants detected in the stripper influent. Permits for the air stripper to be used in the selected remedy will reflect conditions in the influent and will be reviewed periodically to account for any changes in the aquifer.

II. LETTERS RECEIVED DURING THE COMMENT PERIOD

E.1 Issue: What is the relationship between the "northern" and "southern" operable units?

Response: The terms northern and southern operable units are used as a matter of convenience by the consultant to differentiate between the two plumes and their respective sources.

E.2 Issue: The western limits of the plume should be better defined and an estimate made of the amount of contaminants that are being discharged to the Oswego River on a daily basis.

Response: Due to the rate of groundwater extraction from Municipal Well 2 and Keller Well 2, the contamination which currently reaches that area is captured and treated by the air stripper. Another major factor limiting contamination migration to the river is the fact that the river is hydraulically a "loosing" stream. This acts to deflect and inhibit contaminant flow to the river. Furthermore, the selected remedy will create a hydraulic barrier to further contaminant migration. This barrier will be located approximately 200 feet east of Route 57. An effort to quantify the low levels of VOCs now reaching the river would be based on extremely speculative numbers and would no longer be valid once the site remedy is implemented.

E.3 Issue: Further define the sources of groundwater contamination for the "northern" plume as they are not understood and may be dense non-aqueous phase liquids (DNAPLs) or soils (sediments) that contain appreciable volatile organic compound (VOC) concentrations.

Response: The extensive sampling of the northern source area soils and the long-term groundwater sampling from numerous wells in the source area have not detected significant residual soil contamination or DNAPL. The selected remedy will address and control any residual contamination and groundwater contamination. (See Response to E.4)

E.4 Issue: The sources of groundwater contaminants should be identified and removed to accelerate the remediation of the site.

Response: In an effort to provide for active and aggressive source remediation and to address the concerns of the public and the State, and to further the desire of Miller to have a rapid and efficient remediation, Miller is exploring the efficacy of air sparging and vapor extraction to augment the selected remedy. This process, if found to be practical, would address the concerns over DNAPL, would shorten the duration of the remedy, and would satisfy the Department's preference for remedies with a strong source control component. The technical feasibility of this procedure is currently being assessed.

E.5 Issue: Assuming constant pumping, the discharge of 10 parts per billion of VOCs to the Oswego River per day upstream of the City of Fulton's Municipal Wellfield is totally unacceptable.

Response: Contaminant levels which will not adversely impact the receiving water body or wellfield will be established during the remedial design process.

E.6 Issue: A study funded by the Miller Brewing Company is needed to determine the capacity and overall quality of the impacted wellfield.

Response: Water quality has been routinely monitored at the public water supply and at 120 monitoring wells on the aquifer. This monitoring effort has provided a very large data base describing groundwater quality in the aquifer over a period of approximately nine years. An appropriate monitoring program will continue throughout the remedial effort. The data gathered is routinely, and will continue to be, supplied to the City of Fulton. We do not anticipate that the quantity of water available to the city will be diminished. The issue of an additional investigation by Miller should be addressed in discussions between the City of Fulton and Miller.

E.7 Issue: The expansion of the 1 million gallon treatment facility located on City of Fulton Water Work's property and the construction of a structure to store treated water for municipal use needs to be assessed.

Response: These issues need to be addressed in discussions between the City of Fulton and Miller.

E.8 Issue: The City of Fulton should be reimbursed by the Miller Brewing Company in the amount necessary for the purchase of equipment to manage the wealth of information currently available for the Miller Container Site and the additional data that will be developed during the remedial phase and monitoring period. The City should also be reimbursed for costs associated with training City employees to utilize this information on behalf of the City of Fulton.

Response: These issues need to be addressed in discussions between the City and Miller.

E.9 Issue: The City of Fulton wishes to be indemnified for any unforeseen consequences which might arise from the implementation of the remedy. This indemnification would have to cover any loss or costs incurred by the City as a consequence of the remedy or the underlying inactive hazardous waste site.

Response: This is a legal issue which may be best addressed directly between the City and Miller. That not withstanding, an emergency contingency plan has been developed under Consent Order to address the potential of further degradation of water quality at the well field. Should water quality deteriorate to the point where the existing treatment system could not adequately remove contaminants (which is very unlikely), an alternate water source such as OCWA would be used until the treatment system could be upgraded. The plan contains ample provisions to ensure that the residents of Fulton would not be exposed to contaminants in their drinking water.

- E.10 Issue: The remedial action plan must be binding on any successor in interest of the responsible party, and owners of the fee title to the real property affected by the contamination, and their successors in interest.
 - Response: The Consent Order covering Remedial Design and Remedial Action will be binding upon Miller and its successors, etc.
- F.1 Issue: Fulton Safe Drinking Water Action Committee (FSDWAC) opposes the discharge of solvent-contaminated groundwater to the Oswego River at any level because of the impact it (made) may have on the quality of the municipal wellfield due to recharge and the effect it may have on the upgrade of the Oswego River to "Class A" in the future as recently supported by the Department's Division of Water.

Response: (See Response to E.5)

F.2 Issue: Rather than discharging solvent contaminated groundwater to the river, FSDWAC supports its treatment to non-detect and the construction of a facility for its storage and use by the City of Fulton.

Response: As stated in response A.6 above, discharge limits will be established that are protective of the river and wellfield. To be used as a source of water to a public supply system, the recovery wells would need to meet various additional requirements. The use of these wells as a drinking water source is not feasible.

F.3 Issue: The capacity of the municipal well field should be examined to determine the maximum production potential. If the capacity exceeds the one million gallon per day limit of the treatment facility then Miller should be required to construct an expanded facility or make up the difference with water purchased from the Onondaga County Water Authority.

Response: See Responses E.6 and E.7.

F.4 Issue: FSDWAC supports the removal of solvent-contaminated soils (sediments) and the investigation, mobilization, and removal of dense non-aqueous phase liquid as demonstrated at the national priorities list Fulton Terminals Site. It would be unconscionable for the Department to do less for the City of Fulton and the State of New York than the U.S. Environmental Protection Agency.

Response: See Responses E.3 and E.4.

F.5 Issue: The Department should review its citizen participation program with regard to this site. Public involvement relating to this site has been controlled, compromised and/or non-existent.

Response: The Department will review the program for this site. Please refer to Section 10 of this Record of Decision which provides a brief list of some of the public participation activities conducted at this site.

G.1 Issue: The Order on Consent which committed Miller to the construction and operation of the municipal air stripper (#A702659106) sets forth the conditions under which Miller's obligations would terminate. The PRAP states that the continued operation of the air stripper is an integral part of the remedy. This would seem to be a contradiction.

Response: The terms in the Consent Order under which Miller's obligation for the air stripper would end remain valid. The continued operation of the system in accordance with the order is an important component of the selected remedy. The statement in the PRAP acknowledges this and is not in any way intended to diminish the obligations under the order.

G.2 Issue: The EPA has, through its contractors, been conducting site inspections and record searches with regard to the Miller site. How will this impact the implementation of the remedy?

Response: We do not anticipate that the site investigation by the EPA will affect the implementation of the selected remedy.

G.3 Issue: Will the Record of Decision provide for sufficient flexibility to allow Miller to take additional, supplemental measures to expedite the remediation of the site? These measures might include established technologies such as air sparging.

Response: It is our belief that there is sufficient flexibility in this document to allow for an expansion of the remedy should air sparging technology prove effective. The use of air sparging would be responsive to many of the concerns raised by the public regarding source control and the remediation of possible DNAPL.

G.4 Issue: The site is currently referred to in the PRAP as the "Miller Container Division Site", however, Miller no longer owns the site. It would be appropriate to change the site reference.

Response: The site name is being changed to the "Former Miller Container Site".

H.1 Issue: We would like to propose a technology called the HYDROX process as a method of augmenting the remedy selected for the Miller site. This would be a supplement to the air stripper and carbon treatment proposed for water from the system's recovery wells.

Response: The selection of specific vendors for technology processes is done during the remedial design process. The Department will forward the information provided to the PRP's consultant for consideration.

I.1 Issue: Fulton should not be deprived of any of its water supply because of the implementation of the remedy.

Response: As indicated in Response A.1, estimates of the impact of the extraction system on the municipal well field production will be a reduction of less than two tenths of one percent.

I.2 Issue: All discharges from the project should achieve non-detectable concentrations of contaminants.

Response: The reasons that it is not feasible to achieve non-detect are provided in Response A.6. Specifically, the initial concentration of contaminants extracted from the source areas will be so much higher that even if the same removal efficiencies are achieved, some contaminants will be detectable.

J.1 Issue: The amount of advanced notice provided for the public meeting was not sufficient.

Response: An effort is made to get public notice regarding these meetings out about ten days to two weeks before the meetings. The meeting notice, as well as any information sheets, are sent to persons who have indicated an interest in the site. These mailing lists are taken from correspondence received, attendance sheets at previous public meetings, and local tax maps. Despite this, some individuals who have a sincere interest in a site are sometimes omitted from the mailing list. We regret this and will see that all persons who call or write about the site are included in future mailings.

J.2 Issue: The combination of the timing of the comment period around the holidays and the meeting being held in December with the bad weather indicates that you are not serious about informing the public and receiving comments.

Response: While we try to avoid scheduling public meetings at times which conflict with the holidays it is not always possible to eliminate a whole month from our schedule. We regret that we do encounter inclement weather on days of public meetings. In the event that the weather is of such severity that it would hinder interested persons from attending the meetings, we would attempt to reschedule.

J.3 Issue: You have "fiddled around" with the site for at least four years. What is the hurry to remediate the site now?

Response: Over the past four years the site was investigated. Additional areas of contamination were discovered and the volume of the current treatment system was expanded. A municipal water supply treatment system was designed and constructed to remove contamination from the city's wells. An extensive monitoring effort has been carried out which provides the community with a greater understanding of potential impacts to the city water supply. The large volume of data has been used to develop an effective

remedial action plan. While the site investigation has progressed, documents and data have been made available to the public so no one would have to read through all the background all at once. We have also endeavored to provide a concise description of the selected remedy in the Proposed Remedial Action Plan along with the data on which the selection was based. In an effort to accommodate concerned members of the community, the comment period was extended from the December 30th end date through January 17th, at the request of persons attending the public meeting. A subsequent request was made to extend the comment period to February 1st, and this too was honored.

APPENDIX B

ADMINISTRATIVE RECORD

FORMER MILLER CONTAINER SITE SITE # 7-38-029

1)	Record of Decision, Former Miller Container Division	(3/95)
2)	Proposed Remedial Action Plan, Miller Container Division	(10/94)
3a) 3b) 3c) 3d)	Consent Order A7-0111-87-04; IRM order Consent Order A7-0111-87-04; amendment to 1/22/88 order Consent Order A7-0227-90-04; RI/FS order Consent Order A7-0265-91-06; IRM order to construct municipal water transport	(1/22/88) (3/90) (4/12/90) eatment (8/91)
4)	Miller Container Division-Phase II Hydrogeologic Investigation in the Vica Spill Containment Tank	cinity of (12/86)
5)	Miller Container Division RI/FS Workplan	(10/90)
6)	Citizen Participation Plan	(10/90)
7)	Miller Container Division Remedial Investigation Report (Vol. I,II,III)	(7/93)
8)	Reynolds Can Plant Site Feasibility Study Report	(7/94)
9)	Reynolds Can Plant Remedial Investigation Report Addendum	(7/94)
10)	Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA - Interim Final; EPA/540/G89/004 OSWER Directive 9355.3-01, October 1988	

11) Relevant Correspondence

- G. A. Carlson to M. J. O'Toole, NYSDOH concurrence letter, 11/23/94.
- D. Barthold to M. DiPietro, FS comment letter response, 9/14/94.
- M. DiPietro to D. Barthold, FS comments, 8/30/94.
- M. DiPietro to D. Barthold, FS comments, 6/21/94.
- M. Wilder to M. DiPietro, Summary of meeting held 5/23/94, 6/2/94.
- M. DiPietro to M. Wilder, Preliminary FS comments, 3/24/94.
- M. DiPietro to D. Barthold, Preliminary FS comments, 11/23/93.
- D. Barthold to M. DiPietro, RI comment response, 10/29/93.
- M. DiPietro to J. Boehler, RI comments, 10/15/93.
- M. DiPietro to J. Boehler, Air emissions monitoring, 5/28/93
- " , North migration route comments, 4/13/93
- " , Pump test RW-1 comments, 4/12/93
- " , Pump test Kellar 1, Kellar 2, Municipal 2 comments 4/8/93
- J. Boehler to M. DiPietro, RI correspondence, 3/19/93
- M. DiPietro to J. Boehler, Soil remediation units, 3/8/93
- M. Barone to M. DiPietro, Soil remediation units, 12/23/92
- M. DiPietro to M. Barone, RI meeting with Miller, 11/4/92
- M. Barone to Tuohy/Heerkens, Treatment plant, chlorinization issue, 11/3/92
- D. Klippel to R. Parsons, " " " , 10/30/92
- Tuohy/Heerkens to Kogut/Barone, " " , 10/26/92
- G. Valette to M. Barone, " " " , 10/23/92
- R. Parson to D. Klippel, " " ", 10/23/92
- M. Barone to G. Valette, " " ", 10/21/92
- M. Barone to M. DiPietro, Draft RI comment response, 9/21/92
- M. DiPietro to M. Barone, Draft RI comments, 8/7/92
- R. Young to M. DiPietro, Air permit memo, 4/28/92
- M. DiPietro to M. Barone, Water treatment system, general, 3/6/92
- M. DiPietro to M. Barone, Interim RI comments, 9/24/91
- M. Barone to D. Tuohy, Response to information demand, 6/27/91
- M. DiPietro to M. Barone, RI/FS work plan approval, 2/13/91
- M. Barone to M. DiPietro, RI/FS work plan response to comments, 2/1/91
- M. DiPietro to M. Barone, RI/FS work plan comments, 1/17/91
- Malcolm Pirnie, Inc. to DEC, Well location proposal, 1/91



- M. Barone to D. Tuohy, Information demand response, 12/21/90
- L. Messina to D. Tuohy, RI/FS work plan response, 10/17/90
- R. Brazell to T. Swett/L. Messina, RI/FS work plan comments, 8/7/90
- L. Messina to D. Tuohy, Information demand response, 6/29/90
- D. Tuohy to B. Kogut/G. Reich, Information demand, 5/23/90

Key to Affiliations

Barone, M. Miller Brewing Company

Boehler, J. Miller Brewing Company/Reynolds

Brazell, R. NYSDEC, Region 7

DiPietro, M. NYSDEC, DHWR

Heerkens, R. NYSDOH

Klippel, R. Malcolm Pirnie, Inc.

Kogut, B. Bond, Schoeneck, & King

Messina, L. Miller Brewing Company

Parsons, R. City of Fulton

Reich, G. Miller Brewing Company

Swett, T. Miller Brewing Company

Tuohy, D. NYSDEC, DEE

Valette, G. City of Fulton, Mayor

Young, R. NYSDEC, DAR

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



July 31, 1991

via Federal Express

Garrett W. Reich, Esq. Miller Brewing Company 3939 West Highland Boulevard Milwaukee, Wisconsin 53208

RE: Treatment Plan for Municipal Wellfield Miller Container Site - # 738029

Dear Garrett:

Enclosed are two final copies of the Order IRM Order. My understanding is that Miller will execute both copies and return them to me by Friday, August 2, 1991.

I am forwarding to the City two original copies of their signature page.

Upon receipt of your executed copies, I will recommend them to Deputy Commissioner Sullivan for his signature.

Very truly yours,

Dolores A. Tuohy

Division of Environmental

Enforcement

cc: B. Kogut

J. Mirabito

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of an Interim Remedial Measure at an Inactive Hazardous Waste Disposal Site by:

ORDER ON CONSENT

INDEX # A702659106

MILLER BREWING COMPANY, CONTAINER DIVISION,

Respondent.

Site No. 738029

WHEREAS,

- 1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites."
- 2. Miller Brewing Company is a corporation organized and existing under the laws of the State of Wisconsin and is authorized to do business in the State of New York. Miller Brewing Company has a Container Division (the "Respondent"), which operates a canmaking facility in the Town of Volney, Oswego County (the "Site"). The Miller Container facility is located approximately 1200 feet southeast of the Fulton,

 New York municipal boundary, approximately 1000 feet northeast of the Oswego River and approximately 900 feet south of New York

State Route 481. A City of Fulton ("the City") municipal drinking water wellfield is located hydrogeologically downgradient of the facility.

- 3. Respondent formerly had in use a spill containment tank installed near the northwest corner of its facility ("the Spill Area"), which was found at the time of its excavation in the Spring of 1986 to have been leaking.
- 4. A soil gas survey conducted during 1990 defined two potential areas of additional contamination: an area at the north corner of the facility and an area at the south corner of the facility, both of which were formerly used for drum storage. An investigation of these areas showed a moderate level of contamination at the south corner of the facility.
- 5. In April of 1991, a second spill area was identified within the facility during the excavation of a sump. Respondent is currently investigating this area.
- 6. Laboratory analyses of ground water samples from monitoring wells installed at the Site have detected the presence of methylene chloride, 1,1-dichloroethylene, 1,1-dichloroethane, 1,1,1-trichloroethane ("TCA"), tetrachloroethylene, and other contaminants.
- 7. A contaminant plume from the former spill containment tank was identified in the aquifer at the Site. TCA and other contaminants identified at the Site have been detected at the municipal water wellfield. Respondent has pumped two municipal drinking water wells, Kellar Well Number 2 ("K-2") and Municipal

- Well Number 2 ("M-2"), to the Oswego River since April of 1990 when levels of contaminants in the two wells began to increase.
- 8. A third municipal drinking water well, Kellar Well Number 1 ("K-1"), provides the City with approximately one-third of its total water supply. Sampling at K-1 has shown sporadic contamination by volatile organics.
- 9. The Department alleges that Respondent is a responsible party with respect to contamination migrating toward and detected at K-1, K-2 and M-2.
- 10. Respondent and the Department executed Order on Consent # A701118704, effective January 22, 1988, pursuant to which Respondent implemented an interim remedial measures program intended to treat ground water at the Site to acceptable levels. The interim remedial program included the installation of three ground water recovery wells and the treatment of contaminated ground water by an air stripper. The program also required the periodic monitoring of the monitoring wells on the Site to assess the effectiveness of the interim remedial program.
- 11. Respondent and the Department executed an Amendment to Order on Consent # A701118704, effective March 29, 1990, pursuant to which Respondent is implementing an Interim Remedial Measures Program which includes the pumping of M-2 into the Oswego River.
- 12. Respondent and the Department executed Order on Consent # A7-0227-90-04, effective April 23, 1990, pursuant to which Respondent is conducting a Remedial Investigation/ Feasibility

Study ("RI/FS") at the Site.

- 13. The Site is an inactive hazardous waste disposal site, as that term is defined at ECL Section 27-1301(2) and has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 738029. The Department has classified the Site as a Classification "2" pursuant to ECL Section 27-1305(4)(b), having found that the Site presents a "significant threat to the public health or environment action required."
- 14. Pursuant to ECL Section 27-1313(3)(a), whenever the Commissioner of Environmental Conservation (the "Commissioner") "finds that hazardous wastes at an inactive hazardous waste significant threat site constitute a the disposal environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the Department, at such site, and (ii) to implement such program within reasonable time limits specified in the order."
- 15. The Department and Respondent agree that the goal of this Order is for Respondent to undertake interim remedial measures which include (1) the development and construction of a long-term treatment system for drinking water pumped from K-1, K-2 and M-2, (2) the temporary pumping of water from K-1, K-2 and M-2 into the Oswego River, and (3) the provision of water from the Onondaga County Water Authority ("OCWA") to the City

during the period when K-1, K-2 and M-2 are pumped into the Oswego River.

- 16. As a precondition to its entering into this Order, the Department has required Respondent to agree to transfer ownership of the long-term treatment system to the City.
- 17. Respondent, having waived its right to a hearing herein, has consented to the issuance of this Order without any adjudication of fact or law and agrees to be bound by its terms. Respondent's consent to and compliance with this Order does not constitute, and shall not be construed as, an admission of liability of any kind or an admission by Respondent of law or fact or of the applicability of any law to conditions at the Site.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

- I. Respondent has retained Malcolm Pirnie, Inc. to perform the technical and engineering obligations required by this Order and Syracuse Research Corporation ("SRC") and/or Galson Laboratories to perform the analytical obligations under this Order. The Department has approved Respondent's use of Malcolm Pirnie, Inc., SRC and Galson Laboratories. Any other consultants, contractors or laboratories retained by Respondent to perform technical, engineering or analytical obligations required by this Order must be acceptable to the Department.
 - II. A. All submittals made pursuant to paragraphs III

through VI of this Order shall be prepared in accordance with Section 5-1.22 of the New York Sanitary Code.

- B. (1) The New York State Department of Health ("DOH") and the City shall review each of the submittals Respondent makes pursuant to paragraphs III through VI of this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. Within 30 days of receipt of the submittal, DOH shall notify Respondent in writing of DOH's and the City's approval or disapproval of the submittal. All approved submittals shall be incorporated into and become an enforceable part of this Order.
- (2) If DOH and the City disapprove a submittal, DOH shall so notify Respondent in writing and shall specify the reasons for their disapproval. Within the time frame set by DOH in its notice of disapproval, Respondent shall make a revised submittal to DOH and the City that addresses and resolves all of DOH's and the City's stated reasons for disapproving the first submittal.
- (3) Within 30 days after receipt of the revised submittal, DOH shall notify Respondent in writing of DOH's and the City's approval or disapproval. If DOH and the City disapprove the revised submittal, Respondent shall be in violation of this Order and the Department may take whatever action or pursue whatever rights it has pursuant to any

provision of statutory or common law. If DOH and the City approve the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

Respondent, DOH and the City agree to attempt to use best efforts to work in parallel in order to facilitate the rapid completion of the long-term treatment system.

Long-Term Treatment

III. On or before August 2, 1991, Respondent shall submit to DOH and the City a Treatability Study that will support air stripper technology for use in a ground water treatment system ("the Treatment System") to be used for the long-term treatment of water pumped from K-1, K-2 and M-2 prior to the water's introduction into the City's drinking water supply.

IIIA. Within 14 days of DOH's and the City's approval of the Treatability Study, Respondent shall submit an Engineering Report for the Treatment System to DOH and the City.

IV. Within 30 days of DOH's and the City's approval of the Engineering Report, Respondent shall submit Plans and Specifications for the Treatment System to DOH and the City.

The Plans and Specifications shall provide for a Treatment System which, at a minimum:

- (i) Treats a range of flow from 549,000 gallons per day ("GPD") to 1,000,000 GPD of water from K-1, K-2 and M-2;
- (ii) Treats the water pumped from K-1, K-2 and M-2 so that the following contaminants will be

"non-detectable" in the water prior to the water's return to the municipal water system:

Benzene
1,2-Dichloroethane
Ethylbenzene
Toluene
1,1,1-Trichloroethane
Trichloroethylene
Chloroform
1,1-Dichloroethane
Tetrachloroethylene
1,1-Dichloroethylene
Xylenes, Total
Methylene Chloride
1,2-Dichloroethylene (cis- and trans-)

For purposes of this Order, "non-detectable" shall mean a concentration below 0.5 micrograms per liter;

(iii)Returns treated groundwater to the
City's municipal water system;

(iv) Includes carbon filtration for the Treatment System's exhaust gases; and

(v) Meets all State, federal and local permitting requirements, including the requirements of the Department's Division of Air.

The Department's Division of Air shall make any submittal for review made pursuant to this Order the top priority for review for Region 7. The Division of Air shall notify Respondent of its approval or disapproval within 60 days of the Division of Air's receipt of the submittal.

V. Upon DOH's and the City's approval of the Engineering Report and Plans and Specifications, Respondent shall commence construction of the Treatment System in accordance with the

approved Plans and Specifications.

Upon the substantial completion of construction ("Substantial Completion"), Respondent shall undertake a preentry testing program in accordance with instructions from DOH. Respondent shall notify the City of Substantial Completion, in writing, within one business day of Substantial Completion. Within one business day of such notification, the City shall submit to DOH an application for a certificate of "Approval of Completed Works."

Respondent shall complete the pre-entry testing program and fully prepare the Treatment System to be put into long-term operation treating municipal drinking water on or before June 30, 1992.

Within 30 days of Substantial Completion, Respondent shall submit to DOH and the City "as-built" drawings and a final engineering report.

VI. Within 45 days of approval of the Engineering Report and Plans and Specifications, Respondent shall submit to DOH and the City an Operation, Maintenance and Monitoring Plan for the Treatment System and an Emergency/Contingency Plan detailing steps which Respondent shall take if 1,2-Dichloropropane, 1,1,2-Trichloroethane, 1,3-Dichlorobenzene or Bromochloromethane is identified as being present at or in the vicinity of K-1, K-2 or M-2 and to increase, change or modify the system and its operation to respond to changes in groundwater quality and/or data from the Remedial Investigation/ Feasibility Study or other

monitoring, including increases in contaminant levels or the identification of new contaminants in the aguifer.

VIA. In the event modifications to the Treatment System are required which are documented to exceed \$200,000.00 in costs, Respondent reserves the right to provide, upon written notice to the Department, DOH and the City, water from alternate source(s), the quantity of which is equal to the daily pumping values for K-1, K-2 and M-2 set forth in Paragraph XIII and the quality of which meets the drinking water standards of this Order, provided that Respondent obtains, independent of this Order, all permits required in connection with the provision of alternate water and the termination or reduction of pumping of K-1, K-2 and/or M-2, including a permit to pump any municipal wells into the Oswego River. If Respondent provides water from alternate source(s), Respondent shall continue to provide such water until Respondent's obligations under this Order terminate in accordance with paragraph XVII.

VII. Following Substantial Completion and the completion of the pre-entry testing program, but in no event later than June 30, 1992, Respondent shall transfer ownership of the Treatment System to the City and the City shall commence and continue to be responsible for the operation, maintenance and monitoring of the Treatment System in accordance with the approved Operation, Maintenance and Monitoring Plan. DOH reserves the right to modify the monitoring plan as it deems appropriate and the City shall monitor in accordance with all

DOH requirements. The City shall report immediately to the Department, DOH and Respondent in the event of any operating problems with the Treatment System and Respondent shall, upon notice, provide the City with the technical assistance required to operate the Treatment System and resolve any problems encountered in the operation.

VIII. Respondent shall be responsible for the additional costs required for the City's operation and maintenance of the Treatment System. For purposes of this paragraph, "additional costs" is defined to be the following costs:

- A. Disposal and replacement of carbon filters. The City shall notify Respondent when the carbon filters need to be replaced in accordance with the approved Operation and Maintenance manual for the Treatment System;
- B. Electrical power to operate the Treatment System, which shall be determined by a separate meter affixed to the Treatment System, and beginning June, 1991, the electrical power to operate the proposed temporary treatment systems and the three municipal wells prior to the Date of Commencement of the Treatment System. The City shall be responsible for the cost of operating the three municipal wells using the Treatment System after the Date of Commencement. For purposes of this Order, the Date of Commencement shall be the date when the Treatment System begins to provide treated water to the City's municipal water system;
 - C. Monitoring required as part of the DOH's approval

of the Treatment System. Respondent shall retain its own DOH certified laboratory to perform the DOH required monitoring and provide a copy of the analytical results to the City;

- Treatment System which cannot be performed by the City's existing staff. This category of expense shall also include reimbursement for the cost of parts in excess of \$100.00, but shall not include the cost of a third-party engineering firm. In the event of operating problems with the Treatment System, the City shall notify the Respondent, who shall retain Malcolm Pirnie, the firm designing the Treatment System or some other duly qualified engineering firm, to provide the necessary, engineering services. Respondent shall reimburse the City for the costs covered in this subparagraph on a monthly basis upon invoices furnished by the City which shall be payable thirty (30) days after Respondent's receipt;
- E. Modifications to the Treatment System which are required as a result of the implementation of the Emergency/Contingency Plan referenced in Paragraph VI of this Order or, if the Respondent chooses to provide water from an alternate source(s) in accordance with Paragraph VIA of this Order, the cost to provide the water;
- F. Out-of-pocket expenses for third-party legal or engineering services, which are necessarily incurred by the City solely as a result of the City's operation of the Treatment System in accordance with the approved Operation and Maintenance

manual; and

G. Notwithstanding the foregoing, the Respondent shall not be responsible for reimbursement of costs arising as a result of any modification made by the City to the Treatment System which is unrelated to Respondent's obligations under this Order. In any event, no modifications to the Treatment System shall be made by the City without prior written approval by the Department and the DOH and without at least 10 days prior written notice to the Respondent.

Temporary Pumping of K-2 and M-2

IX. Commencing upon the effective date of this Order, Respondent shall pump K-2 and M-2 into the Oswego River in accordance with the "Effluent Limitations and Monitoring Requirements," the "Action Level Requirements" and the "General Conditions" set forth in Appendix "A" which is attached hereto and incorporated into this Order. Prior to discharge, the effluent from K-2 and M-2 shall be treated by the temporary granular activated carbon treatment system approved by the Department by letter from Joseph Kelleher to Michael Barone dated May 20, 1991. If the Treatment System will not be put in service until after the arrival of freezing weather, the system serving K-2 and M-2 shall be winterized, as necessary.

The Department's authorization for Respondent to pump K-2 and M-2 into the Oswego River, which is set forth in

Appendix "A," shall terminate on June 30, 1992.

The Department reserves the right to terminate the authorization to pump K-2 and M-2 into the Oswego River in the event Respondent fails to pump K-2 and M-2 in accordance with Appendix "A."

Temporary Pumping of K-1

X. Commencing upon the effective date of this Order, the City shall discontinue the pumping of K-1 into the City's municipal water system and Respondent may pump up to 600,000 gallons per day into the Oswego River. Notwithstanding the foregoing, the Respondent and the City shall work together to reduce the pumping of K-1 to the point where they mutually determine that pumping must be maintained to prevent the flooding of the municipal waterworks. During the period when K-1 is pumped into the Oswego River, the City shall not increase or decrease the pumping of K-1 without prior notice to the Department and Respondent. All water pumped from K-1 into the Oswego River shall be pumped in accordance with the "Effluent Limitations and Monitoring Requirements," the "Action Level Requirements" and the "General Conditions" set forth in Appendix "B" which is attached hereto and incorporated into this Order.

The Department's authorization for Respondent to pump K-1 into the Oswego River, which is set forth as Appendix "B," shall terminate on June 30, 1992.

The Department reserves the right to terminate the

authorization to pump K-1 into the Oswego River in the event Respondent fails to pump K-1 in accordance with Appendix "B."

XI. Within two business days of the effective date of this Order, Respondent shall submit to the Department approvable plans for a temporary treatment system which shall be available to treat K-1's effluent prior to discharge into the Oswego River ("Temporary Plans"). The temporary treatment system shall use the same engineering and design principles as those used for the temporary granular activated carbon treatment system approved by the Department by letter from Joseph Kelleher to Michael Barone dated May 20, 1991.

The Department shall notify Respondent, in writing, of its approval or disapproval of the Temporary Plans within fifteen business days of their submittal.

If the Department disapproves the Temporary Plans, the Department shall notify Respondent, in writing, of the Department's specific objections. Respondent shall, within five days after receiving the notice of disapproval, submit Temporary Plans which have been revised to reflect all of the Department's stated reasons for disapproving the first submittal.

The Department shall notify Respondent, in writing, of its approval or disapproval of the revised Temporary Plans. If the Department disapproves the revised Temporary Plans, Respondent shall be in violation of this Order and Respondent's authorization to pump K-1 into the Oswego River shall terminate.

If the Department approves the Temporary Plans or the

revised Temporary Plans, they shall be incorporated into and become an enforceable part of this Order.

Respondent shall install the temporary treatment system, in accordance with the requirements of the Department-approved Temporary Plans or revised Temporary Plans, within 56 days of the effective date of this Order.

If the permanent Treatment System will not be put in service until after the arrival of freezing weather, the system serving K-1 must be winterized, as necessary.

XII. Within 24 hours of Respondent's receipt of two consecutive test results indicating that the effluent of K-1 is within 80 percent of exceeding the Discharge Limitations or Action Requirements contained in Appendix "B" (e.g., eight micrograms per liter if the discharge level were ten micrograms per liter), Respondent shall commence the treatment of the effluent of K-1 by the temporary treatment system prior to discharge into the Oswego River. If a single sample exceeds the foregoing threshold, Respondent shall, within 24 hours, take a second sample, submit it immediately to a laboratory, and require analysis within 24 hours. Respondent shall submit the second sample's analytical results to the Department within 24 hours of Respondent's receipt of the results.

The treatment of K-1 shall continue for the remainder of the time K-1 is pumped into the Oswego River under the terms of this Order.

Replacement Water from OCWA

XIII. In accordance with existing arrangements, the City has been purchasing water from OCWA to replace water formerly provided by M-2, K-2 and K-1 and Respondent has paid the cost charged by OCWA to the City for the replacement water. Respondent shall continue to pay for the cost of replacement water until the Date of Commencement of the Treatment System. Payment of the cost for the replacement water shall be made monthly, within 30 days after Respondent's receipt of an invoice from the City. For purposes of this paragraph, the following definitions shall apply:

- A. "Cost" the invoice amount charged to the City by OCWA for the replacement water, including any additional "External Customer Charge" imposed by the Metropolitan Water Board.
- B. "Replacement Water" the amount of water provided by M-2, K-2 and K-1 prior to their removal from service. The value of 55,756 GPD shall be used for M-2, 65,066 GPD for K-2, and 656,521 GPD for K-1.

Aquifer Study

XIV. Respondent shall undertake, as part of the RI/FS, the following activities to further define the aquifer servicing K-1, K-2 and M-2:

(a) determine the location, depths, yields and pumping regimens for all wells located on the grounds of the Fulton

Municipal Water Works which are currently or were formerly used as drinking water wells;

- (b) locate and determine the depths of all test wells and piezometers, including United States Geological Survey wells, located on the grounds of the City of Fulton's Water Works; and
- (c) using the information generated by the activities set forth in subparagraphs "a" and "b," above, evaluate the potential for currently identified contamination to migrate to K-1.
- XV. If, for any reason, water from K-1 is used as public drinking water prior to DOH's and the City's approval of Respondent's Operation, Maintenance and Monitoring Plan for the Treatment System, Respondent shall monitor K-1 in accordance with the requirements of paragraph VII of the terminated March 29, 1990 Amendment to Order on Consent # A701118704 until the commencement of the Treatment System.
- XVI. The City hereby grants Respondent, its representatives and contractors access to enter onto the City's property for purposes of sampling K-1, K-2 and M-2 and construction, placement and startup operation of the treatment systems described in paragraphs III through XII of this Order. During periods of construction of the referenced treatment systems, Respondent shall insure the City from liability claims and will issue the City documentation acknowledging this obligation in a form appropriate for Respondent's status as a self-insurer.

XVII. Respondent's obligations under this Order, which remain after June 30, 1992, except paragraph XXVIII, shall terminate if Respondent demonstrates to the satisfaction of the Department, DOH and the City that:

A. Neither K-1, K-2 nor M-2 has been impacted by contamination for which Respondent is a source, generator or responsible party; or

B. Remedial measures cause the aquifer to be remediated to the point where treatment is no longer necessary.

Upon receipt of a written request by Respondent to terminate its obligations, the Department, DOH and the City shall notify Respondent, in writing, whether the Department, DOH and the City are satisfied with Respondent's showing.

If Respondent's approved Feasibility Study, undertaken as part of the RI/FS, identifies criteria for determining when the aquifer is remediated to the point where treatment is no longer necessary or may be suspended, the Department, DOH and the City shall use that criteria in determining whether they are satisfied with Respondent's showing.

XVIII. Within 360 days of the effective date of this Order, or 30 days after receipt of an invoice from the Department, whichever is later, Respondent shall pay to the Department a sum of money which shall represent reimbursement for the Department's expenses including, but not limited to, direct

labor, overhead, travel, analytical costs and contractor costs incurred by the State of New York for negotiating this Order, reviewing and revising submittals made pursuant to this Order, overseeing activities conducted by the Respondent pursuant to this Order, and collecting and analyzing samples taken pursuant to this Order. Subsequent payments shall be made on an annual basis, within 30 days after receipt of an invoice from the Department, during the period in which Respondent performs any activities under this Order. Such payment shall be by check payable to the Department of Environmental Conservation. Payment shall be sent to the Bureau of Program Management, Division of Hazardous Waste Remediation, NYSDEC, 50 Wolf Road, Albany, New York 12233. The Department shall itemize costs incurred. Itemization of costs shall include an accounting of personal services indicating the employee name, title, biweekly salary and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. This information shall be documented by the Department's quarterly reports of Direct Personal Service. The Department's approved fringe benefit and indirect cost rates shall be Non-personal service costs shall be summarized by applied. category οf expense (supplies and materials, travel, contractual) and shall be documented by the New York State Office of the State Comptroller's quarterly expenditure reports. Respondent shall not be obligated to pay any portion of costs which it demonstrates to the Department's satisfaction were incurred inconsistent with this Order or which are the result of clerical errors.

XIX. Within 30 days of receipt of an invoice from the City, Respondent shall pay to the City, a sum of money which shall represent a not-to-exceed cost of \$10,000 for the City to retain a third-party engineering firm to review the submittals for the Treatment System in accordance with Paragraphs II through VI of this Order.

XX. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent and the Department shall also have the right to take its own samples. The Department shall provide Respondent with the analytical results of any such samples, after the Department's receipt of Respondent's results.

XXI. Respondent shall provide notice to the Department at least 5 working days in advance of any field activities to be conducted pursuant to this Order.

XXII. Except as already provided for in paragraph XVI, Respondent shall obtain whatever permits, easements, rights-of-way, rights-of-entry, approvals or authorizations are necessary in order to perform its obligations pursuant to this Order. If the Respondent's good faith efforts are unsuccessful in obtaining any required authorizations, the Department may exercise its authority under the ECL in an effort to assist the Respondent in obtaining the necessary authorizations.

XXIII. Respondent shall permit any duly designated employee,

consultant, contractor or agent of the Department or the Department of Health to enter upon the Site or areas in the vicinity of the Site which may be under the control of Respondent for purposes of inspection, sampling and testing and to assure Respondent's compliance with this Order.

XXIV. Respondent shall not suffer any penalty under this Order, or be subject to any proceeding or actions for any remedy or relief, if it cannot comply with any requirements hereof because of an act of God, war, riot, or other condition as to which negligence or willful misconduct on the part of Respondent was not a proximate cause, provided however that Respondent shall notify the Department, in writing, within five days of when it obtains knowledge of any such condition and request an appropriate extension or modification of the terms of this Order.

XXV. The failure of the Respondent to comply with any term of this Order shall constitute a violation of this Order and the ECL.

- XXVI. A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting, any of the Department's rights, including, but not limited to:
- 1. the Department's right to bring any action or proceeding against anyone other than Respondent, its directors, officers, employees, servants, agents, successors and assigns;
- 2. the Department's right to enforce this Order against Respondent, its directors, officers, employees,

servants, agents, successors and assigns in the event that Respondent shall fail to satisfy any of the terms hereof;

- 3. the Department's right to bring any action or proceeding against Respondent, its directors, officers, employees, servants, agents, successors and assigns with respect to claims for natural resource damages as a result of the release or threatened release of hazardous wastes or constituents at or from the Site or areas in the vicinity of the Site; and
- 4. the Department's right to bring any action or proceeding against Respondent, its directors, officers, employees, servants, agents, successors and assigns with respect to hazardous wastes that are present at the Site or that have migrated from the Site and present a significant threat to human health or the environment.

Other than subparagraph 2 of paragraph XXVI, nothing contained in paragraph XXVI represents a concession on the part of Respondent that the Department has the authority to take any of the actions cited.

B. Except as otherwise provided in this Order, the Respondent and the City reserve their respective rights under applicable law regarding claims with respect to any release of hazardous wastes and/or substances into the environment and claims arising as a result of responding to the environmental conditions at the Site and in the municipal drinking water wellfield which is the subject of this Order.

XXVII. This Order shall not be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

XXVIII. Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order to the extent that Respondent, its contractors or agents are liable under applicable law.

XXIX. The effective date of this Order shall be the date it is signed by the Commissioner or his designee. Upon the effective date of this Order, all terms and conditions of the March 29, 1990 Amendment to Order on Consent # A701118704, except paragraph XIV (the provision requiring Respondent to indemnify the Department and hold it harmless), shall terminate.

XXX. If Respondent desires that any provision of this Order be changed, it shall make timely written application to the Commissioner, setting forth reasonable grounds for the relief sought. A copy of such written application shall be delivered or mailed to:

Michael DiPietro of the Department (at the address set forth in paragraph XXVI.A)

XXXI. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

- A. State and Oswego County/ Non-SPDES:
- 1. Division of Hazardous Waste Remediation,
 New York State Department of Environmental Conservation, 50 Wolf
 Road, Albany, New York 12233, Attention: Michael DiPietro.
- 2. New York State Department of Environmental Conservation, Region 7 Headquarters, 615 Erie Boulevard West, Syracuse, New York 13204, Attention: Charles Branagh, P.E.
- 3. Bureau of Environmental Exposure Investigation, New York State Department of Health, 2 University Place Albany, New York 12203, Attention: Ronald Tramontano, Director.
- 4. Division of Environmental Enforcement, Albany Field Unit, Room 415, New York State Department of Environmental Conservation, 50 Wolf Road, Albany, New York 12233, Attention: Dolores A. Tuohy, Esq.
- 5. New York State Department of Health, 677 South Salina Street, Syracuse, New York 13202, Attention: Ronald Heerkens.
- 6. Bureau of Public Water Supply, New York State Department of Health, 2 University Place, Albany, New York 12203, Attention: Michael Burke, Director.
- 7. Oswego County Health Department, 70 Bunner Street, P.O.Box 3080, Oswego, New York 13126-3080, Attention: Bruce Stillman/ Evan Walsh.
- B. All communication regarding SPDES-related matters must be addressed to:

- 1. Division of Water, New York State Department of Environmental Conservation, Region 7 Headquarters, 615 Erie Boulevard West, Syracuse, New York 13204, Attention: Leland Flocke, Regional Water Engineer.
- 2. Division of Water, New York State Department of Environmental Conservation, 50 Wolf Road, Room 318, Albany, New York 12233, Attention: Joseph Kelleher.

Copies should be sent to the parties set forth in A, above.

- C. All communications regarding Air authorizations must be addressed to:
- 1. Division of Air, New York State Department of Environmental Conservation, Region 7 Headquarters, 615 Erie Boulevard West, Syracuse, New York 13204, Attention: Norman Boyce, Regional Air Engineer.
- 2. Division of Air, New York State Department of Environmental Conservation, PO Box 5170 Fisher Avenue, Cortland, New York 13045, Attention: Randall Young.

Copies should be sent to the parties set forth in A, above.

- D. Communication to be made from the Department to the Respondent shall be made as follows:
- Miller Brewing Company, Legal Department,
 3939 West Highland Boulevard, Milwaukee, Wisconsin, 53208,
 Attention: Garrett W. Reich, Esq.

- 2. Miller Brewing Company, Corporate Engineering, 3939 West Highland Boulevard, Milwaukee, Wisconsin, 53208, Attention: Thomas N. Swett, P.E.
- 3. Miller Brewing Company Container Division, P.O. Box 400, Fulton, New York 13069, Attention: Michael Barone.
- 4. Bond, Schoeneck and King, One Lincoln Center, Syracuse, New York 13202, Attention: Barry R. Kogut, Esq.

E. City of Fulton:

- 1. City of Fulton, Office of the Mayor, Municipal Building, Fulton, New York 13069, Attention: Hon. Muriel Allerton.
- 2. Chief Water Treatment Plant Operator, City of Fulton, Water Works, 960 South First Street, Fulton, New York, 13069.
- 3. Water and Sanitation Commissioner, City of Fulton, 141 South First Street, Fulton, New York 13069.

XXXII. The terms of this Order shall be deemed to bind the signatories thereto and their respective officers, directors, agents, servants, employees, successors and assigns. Nothing herein shall be construed to bind any other entity.

XXXIII. No terms, conditions, understandings or agreements purporting to modify or vary the terms hereof shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestions or comments by the Department regarding reports, proposals, plans, specifications, schedules or any other submittals shall be construed as

CONSENT BY RESPONDENT

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fact, con	Respondent sents to the to a hearing	e issuing an	d entering	of this Orde	er, waiv
be bound	by this Ord	er.	WILLIAM	n A Schimu	/5
			1.	u Dobels	
	•	By:		/ /	Compact
•	.	· -		ME OF SIGNE	R)
	•	Title:	assettant	SPERETARY	
	· · ·	Date: _	august 1	1992	A THE RESERVE THE PARTY OF THE
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STATE OF	WISCONSIN)) s.s.:			
COUNTY OF	MILWAUKEE)			•

On this day of lyquet 1991, before me personally came William 25 Schmus, to me known, who being duly sworn, did depose and say that he resides in Deptiment Secretary of the Wisconsin

corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

Notary Public

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TO

8933296315 223598

P.03

CITY OF FUNTON

by:

(TYPE NAME OF SIGNER)

Title:

Muriel L. Allerton Mayor

Date:

Augus+ 6, 1491

STATE OF NEW YORK

COUNTY OF Oswego

_ day of August

on this eighth day of August , 1991, before me personally came Muriel L. Allerton , to me known, and being duly sworn, did depose and say: that she resides at 827 Forest Ave., Fulton, NY , that she is the Mayor of the City of Fulton, the municipality described herein, that she was authorized by resolution of the Common council of the City of Fulton to execute the foregoing instrument, and that she signed her name to said instrument by like authorization. on this eighth

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JEROME A. MIRABITO
Nosary Public, State of Naw
No. C2M14710822
Qualified in Onwego Coun
Commission Expires December 3



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relieving Respondent of its obligations to obtain such formal approvals as may be required by this Order.

DATED: Albany New York

THOMAS C. JORLING commissioner New York State Department of Environmental Conservation

relieving Respondent of its obligations to obtain such formal approvals as may be required by this Order.

DATED:

, New York , 1991

> THOMAS C. JORLING Commissioner New York State Department of Environmental Conservation

BY:

Edward O. Sullivan Deputy Commissioner

CONSENT BY RESPONDENT

Respondent hereby, without any admission of law or fact, consents to the issuing and entering of this Order, waives its right to a hearing herein as provided by law, and agrees to be bound by this Order.

B ^r	y:
	(TYPE NAME OF SIGNER)
т	itle:
D	ate:
STATE OF WISCONSIN)) s.s COUNTY OF MILWAUKEE)	• :
19, before me personal: me_known, who being duly	day of, to, to, to, to, to, to, to, to, to, that he is the; that he is the, the; the of the
instrument; that he knew seal affixed to said instrument was so affixed by the order	and which executed the foregoing the seal of said corporation; that the nument was such corporate seal; that it der of the Board of Directors of said signed his name thereto by like order.
	Notary Public

CITY OF FULTON

1	ву:					
	<i>-</i> 1.	('	TYPE	NAME	OF	SIGNER)
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STATE OF NEW YORK)) s.s.:						
COUNTY OF)						
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resides at of the City of Fulton, the mushe was authorized by resolution of Fulton to execute the signed her name to said instr	tion of forego	f the C ing ins	ommo:	n Cou ent, a	ncı and	that she
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Appendix "A"

SPDES No.:	ΝΥ		**************************************
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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	EFFLUENT	LIMITATIONS	AND	MONITORING	REQUIREMENTS
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During the period beginning	Effective Date of Consent Order #A702659106
and lasting until	June 30, 1992 or as otherwise specified in Order.

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

				Minimum Monitoring Requirements		
Outfall Number & Effluent Parameter	Discharg Daily Avg.	e Limitations Daily Max.	Units	Measurement Frequency	Sample	
001 Groundwater:		Daily Max.		rrequency		
		•				
Flow	Monitor	Monitor	gpd	Continuous	Recorder	
Benzene	Monitor	0.02	lb/d	Weekly	GRAB	
Benzene	Monitor	0.01	mg/l	Weekly	11	
1,2-Dichloroethane	Monitor	0.05	lb/d	Weekly	Ħ	
1,2-Dichloroethane	Monitor	0.03	mg/l	Weekly	11	
1,2-Dichloropropane	Monitor	0.05	lb/d	Weekly	ti	
1,2-Dichloropropane	Monitor	0.03	mg/l	Weekly	11	
Ethylbenzene	Monitor	0.02	lb/d	Weekly	ti	
Ethylbenzene	Monitor	0.01	mg/l	Weekly	Ħ	
,2,2-Tetrachloroethane	Monitor	0.05	lb/d	Weekly	11	
	Monitor	0.03	mg/l	Weekly	11	
Toluene	Monitor	0.02	lb/d	Weekly	11	
Toluene	Monitor	0.01	mg/l	Weekly	11	
1,1,1-Trichloroethane	Monitor	0.02	lb/d	Weekly	11	
1,1,1-Trichloroethane	Monitor	0.01	mg/l	Weekly	Ħ	
Trichloroethylene	Monitor	0.02	lb/d	Weekly	11	
Trichloroethylene	Monitor	0.01	mg/l	Weekly	11	
Chloroform	Monitor	0.05	lb/d	Weekly	Ħ	
Chloroform	Monitor	0.03	mg/l	Weekly	. 11	
1,1-Dichloroethane .	Monitor	0.05	lb/d	Weekly	11	
1,1-Dichloroethane	Monitor	0.03	mg/l	Weekly		
Tetrachloroethylene	Monitor	0.05	lb/d	Weekly		
Tetrachloroethylene	Monitor	0.03	mg/l	Weekly	11	

^{*} Required turnaround on analysis shall be a maximum of seven days.

Copies of the results should be submitted to the DEC within two working days of completion of the receipt of the analysis.

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EFFLUENT UMITATIONS	AND	MONITORING	REQUIREMENTS
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During the period beginning	Effective Date of Consent Order #A702659106
and lasting until	June 30, 1992 or as otherwise specified in Order.
	the limited and monitored by the normittee as engoified below.

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

•			Minimu Monitoring Req		
Outfall Number &	Discharge	Limitations		Measurement	Sample
Effluent Parameter	Daily Avg.	Daily Max.	Units	Frequency	Туре
001 - Groundwater					
1,1,2-Trichtorethane	Monitor	0.05	lb/d	Weekly	Recorde
1,1,2-Trichtoroethane	Monitor	0.03	mg/l	Weekly	Grab
1,3-Dichiorobenzene	Monitor	0.02	lb/d	Weekly	
1.3-Dichlorobenzene	Monitor	0.01	mg/l	Weekly	## ##
1,1-Dichloroethylene	Monitor	0.05	lb/d	Weekly	**
1,1-Dichloroethylene	Monitor	0.03	mg/l	Weekly	**
Xylenes, Total	Monitor	0.02	lb/d	Weekly	rt
Xylenes, Total	Monitor	0.01	mg/l	Weekly	11
Zinc, Total	Monitor	1,5	lb/d	Weekly	#
Zinc, Total	Monitor	1.0	mg/l	Weekly	**
Bromochloromethane	Monitor	0.08	lb/d	Weekly	н
Bromochloromethane	Monitor	0.05	mg/i	Weekly	**
Naphthalene	Monitor	0.02	lb/d	Weekly	ir
Naphthalene	Monitor	0.01	mg/l	Weekly	**
1,2-(cis)-Dichloroethylene	Monitor	0.02	lb/d	Weekly	11
1,2-(cis)-Dichloroethylene	Monitor	0.01	mg/l	Weekly	11
1,2-(trans)-Dichloroethylene	Monitor	0.02	lb/d	Weekly	
1,2-(trans)-Dichloroethylene	Monitor	0.01	lb/d	Weekly	

^{*} Required turnaround analysis shall be a maximum of seven days.

Copies of the results should be submitted to the DEC within two working days of completion of the receipt of the analysis.

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ION LEVEL REQUIREMENTS (TYPE I)

The parameters listed below have been reported present in the discharge but at levels that currently do not require water quality or technology based limits. Action levels have been established which, if exceeded, will result in reconsideration or water quality or technology based limits.

Routine action level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If submission of DMR's is not required by this permit, the results shall be maintained in accordance with instructions on the RECORDING, REPORTING AND MONITORING page of this permit.

If any of the action levels is exceeded, the permittee shall undertake a short-term, high-intensity monitoring program for this parameter. Samples identical to those required for routine monitoring purposes shall be taken on each of at least three operating days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the action level was first exceeded. Results may be appended to the DMR or transmitted under separate cover to the addresses listed on the RECORDING, REPORTING AND MONITORING page of this permit. If levels higher than the actions levels are confirmed the permit may be reopened by the Department for consideration of revised action levels or effluent limits.

The permittee is not authorized to discharge any of listed parameters at levels which may cause or contribute to a violation of water quality standards.

Call Number & Effluent Parameter	Action Level	<u>Units</u>	Minimum Monitoring Ro Measurement Frequency	equirements Sample Type
001 - Treated Groundwater				,
Iron, Total Copper, Total	0.40 0.55	lb/d lb/d	Quarterly Quarterly	GRAB

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GENERAL CONDITIONS (Consent Orders)*

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^{*} This version of General Conditions is Intended to be Incorporated as Appendix A of all Consent Orders for site remediation projects where a State Pollutant Discharge Elimination System permit Is not required but where the order authorizes the treatment and discharge of wastewaters to the surface or groundwaters of New York State.

1. GENERAL PROVISIONS

- a. This order, or a true copy, shall be kept readily available for reference at the wastewater treatment facility.
- b. A determination has been made on the basis of a submitted plans, or other available information, that compliance with the provisions specified in this order will reasonably protect classified water use and assure compliance with applicable water quality standards. Satisfaction of these provisions notwithstanding, if operation pursuant to the order causes or contributes to a condition in contravention of State water quality standards, or if the Department determines, on the basis of notice provided by the operator and any related investigation, inspection or sampling, that a modification of the order is necessary to prevent impairment of the best use of the waters or to assure maintenance of water quality standards or compliance with other provisions of ECL, the Department may require such a modification and may require abatement action to be taken by the operator and may also prohibit the noticed act until the order has been modified.
- c. All discharges authorized by this order shall be consistent with the terms and conditions of this order. Facility expansion or other modifications, treatment and disposal system changes which will result in new or increased discharges of pollutants into the waters of the state must be reported by submission of a formal request for modification of this order. The discharge of any pollutant, not identified and authorized, or the discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this order shall constitute a violation of the terms and conditions of this order. Facility modifications which result in decreased discharges of pollutants must be reported by submission of written notice to the Department.
- d. Where the operator becomes aware that he/she failed to submit any relevant facts or submitted incorrect information prior to or in pursuit of this order or in any report to the Department, the operator shall promptly submit such facts or information.
- e. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the authorized activity in order to maintain compliance with the conditions of this order, unless directed by the Department to continue the activity.
- f. The filing of a request for a modification of this order, or a notification of planned changes or anticipated noncompliance, does not stay any condition of this order.
- g. The operator shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, suspending, or revoking this order, or to determine compliance with this order. The operator shall also furnish to the Department, upon request, copies of records required to be kept by this order.

2. SPECIAL REPORTING REQUIREMENTS

Dischargers must notify the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant (USEPA Priority Pollutants plus phenols, total) which is not specifically controlled in the order, pursuant to General Provision 1 (c) herein. For the purposes of this section, recurrent accidental or unintentional spills or releases on a frequent basis shall be considered to be a discharge.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the order, if that discharge will exceed five times the maximum concentration value reported for that pollutant in the information submitted prior to this order; or the level established by the Department.
- c. That they will begin to use any toxic pollutant which was not reported prior to this order and which is being or may be discharged to waters of the state.

3. EXCLUSIONS

a. The issuance of this order by the Department and the receipt thereof by the operator does not supersede, revoke or rescind an order or modification thereof on consent or determination by the Commissioner issued heretofore by the Department or any of the terms, conditions or requirements contained in such order or modification thereof unless specifically intended by said order.

- b. The issuance of this order does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations; nor does it obviate the necessity of obtaining the assent of any other jurisdiction as required by law for the discharge authorized.
- Unless specifically authorized in this order, the construction of any onshore or offshore physical structures
 or facilities or the undertaking of any work in any navigable waters is not approved.

4. REPORTING NONCOMPLIANCE

- a. Anticipated noncompliance. The operator shall give advance notice to the Department of any planned changes in the authorized facility or activity which may result in noncompliance with this order as soon as the operator becomes aware that non-compliance will be unavoidable.
- b. Immediate and twenty-four hour reporting. The operator shall report <u>any</u> noncompliance which may endanger health or the environment. Any unusual situation, caused by a deviation from normal operation or experience (e.g. upsets, bypasses, inoperative treatment process units, spills or illegal chemical discharges or releases to the collection system) which create a potentially hazardous condition shall be orally reported immediately. Other information shall be provided orally within 24 hours from the time he or she becomes aware of the circumstances. A written noncompliance report shall also be provided within five (5) days of the time the operator becomes aware of the circumstances. The written noncompliance report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent the noncompliance and its reoccurrence.
 - (1) The following shall be included as information which must be reported within 24 hours under paragraph (b) above:
 - (i) any unanticipated bypass which violates any effluent limitation in the order;
 - (ii) any upset which violates any effluent limitation in the order;
 - (iii) violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the order to be reported within 24 hours.
 - (2) The Department may waive, at their discretion, the written report on a case-by-case basis if the oral report has been received within 24 hours.
 - (3) Reports required by this section shall be filed with the Department's regional office having jurisdiction over the facility. During weekends and holidays, oral noncompliance reports, required by this paragraph, may be made at (518) 457-7362.
- c. Duty to mitigate. The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this order which has a reasonable likelihood of adversely affecting human health or the environment.

5. INSPECTION AND ENTRY

The operator shall allow the Commissioner of the Department, the New York State Department of Health, the County Health Department, or their authorized representatives, upon the presentation of credentials and other documents as may be required by law. to:

- enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this order;
- have access to and copy, at reasonable times, any records that must be kept under the conditions of this
 order, including records maintained for purposes of operation and maintenance;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order, and
- d. sample or monitor at reasonable times, for the purposes of assuring compliance with this order or as otherwise authorized by the Environmental Conservation Law, any substances or parameters at any location.

6. SPECIAL PROVISIONS - NEW OR MODIFIED DISPOSAL SYSTEMS

- a. Prior to construction of any new or modified waste disposal system or modification of a facility generating wastewater which could alter the design volume of, or the method or effect of treatment or disposing of the wastes from an existing waste disposal system, the operator shall submit to the Department or its designated field office for review, an approvable engineering report, plans, and specifications which have been prepared by a person or firm licensed to practice Professional Engineering in the State of New York.
- b. The construction of the above new or modified disposal system shall not start until the operator receives written approval of the system from the Department or its designated field office.
- c. The construction of the above new or modified disposal system shall be under the general supervision of a person or firm licensed to practice Professional Engineering in New York State. Upon completion of construction, that person or firm shall certify to the Department or its designated field office that the system has been fully completed in accordance with the approved engineering report, plans and specifications and letter of approval; and the operator shall receive written acceptance of such certificate from the Department or designated field agency prior to commencing discharge.
- d. The Department and its designated field offices review wastewater disposal system reports, plans, and specifications for treatment process capability only, and approval by either office does not constitute approval of the system's structural integrity.

7. MONITORING, RECORDING, AND REPORTING

7.1 GENERAL

- a. The operator shall comply with all recording, reporting, monitoring and sampling requirements specified in this order and such other additional terms, provisions, requirements or conditions that the Department may deem to be reasonably necessary to achieve the purposes of the Environmental Conservation Law, or rules and regulations adopted pursuant thereto.
- b. Samples and measurements taken to meet the monitoring requirements specified in this order shall be representative of the quantity and character of the monitored discharges. Composite samples shall be composed of a minimum of 8 grab samples, collected over the specified collection period, either at a constant sample volume for a constant flow interval or at a flow-proportioned sample volume for a constant time interval, unless otherwise specified in this order. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. At least 4 (rather than 8) aliquots or grab samples should be collected over the specified collection period. Grab sample means a single sample, taken over a period not exceeding 15 minutes.
- c. Accessable sampling locations must be provided, maintained and identified by the operator. New sampling locations shall be provided if proposed or existing locations are deemed unsuitable by the Department or its designated field agency.
- d. Actual measured values of all positive analytical results obtained above the Practical Quantitation Limit (PQL)¹ for all monitored parameters shall be recorded and reported, as required by this order; except, for parameters which are limited in this order to values below the PQL, actual measured values for all positive analytical results above the Method Detection Limit (MDL)² shall be reported.
- e. The operator shall periodically calibrate and perform manufacturer's recommended maintenance procedures on all monitoring and analytical instrumentation to insure accuracy of measurements. Verification of maintenance shall be logged into the daily record book(s) of the facility. The operator shall notify the Department's regional office immediately if any required instrumentation becomes inoperable. In addition, the operator shall verify the accuracy of their measuring equipment to the Department's Regional Office annually.

Practical Quantitation Limit (PQL) is the lowest level that can be measured within specified limits of precision and accuracy during routine laboratory operations on most effluent matrices.

Method Detection Limit (MDL) is the level at which the analytical procedure referenced is capable of determining with a 99% probability that the substance is present. This value is determined in distilled water with no interfering substances present. The precision at this level is +/- 100%.

7.2 SIGNATORIES AND CERTIFICATION

- All reports required by this order shall be signed as follows:
 - (1) for a corporation: by a responsible corporate officer. For the purposes of this section, a responsible corporate officer means:
 - (i) a president, secretary, treasurer, or a vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making function for the corporation, or
 - (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) for a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) for a municipality, state, federal, or other public agency: by either a principal or executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or
 - (4) a duly authorized representative of the person described in items (1), (2), or (3). A person is a duly authorized representative only if:
 - (i) the authorization is made in writing by a person described in paragraph (a)(1), (2), or (3) of this section;
 - (ii) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - (iii) the written authorization is submitted to the Department.
- b. Changes to authorization: If an authorization under subparagraph (a)(4) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subparagrapph (a)(4) of this section must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- c. Certification: Any person signing a report shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision, in accordance with a system, designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the order or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

7.3 <u>RECORDING OF MONITORING ACTIVITIES AND RESULTS</u>

a. The operator shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this order, and records of all data used to complete the application for this order, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

- b. Records of monitoring information shall include:
 - (1) the date, exact place, and time of sampling or measurements;
 - (2) the individual(s) who performed the sampling or measurements;
 - (3) the date(s) analyses were performed;
 - (4) the individual(s) who performed the analyses;
 - (5) the analytical techniques or methods used; and
 - (6) the results of such analyses.

7.4 TEST AND ANALYTICAL PROCEDURES

- Monitoring and analysis must be conducted using test procedures promulgated, pursuant to 40 CFR Part 136, except:
 - (1) should the Department require the use of a particular test procedure, such test procedure will be specified in this order.
 - (2) should the operator desire to use a test method not approved herein, prior Department approval is required, pursuant to paragraph (b) of this section.
- b. Application for approval of test procedures shall be made to the Director of DEC's Division of Water, and shall contain:
 - (1) the name and address of the applicant or the responsible person making the discharge, identification of this particular order and the telephone number of applicant's contact person;
 - (2) the names of the pollutants or parameters for which an alternate testing procedure is being requested, and the monitoring location(s) at which each testing procedure will be utilized;
 - (3) Justification for using test procedures, other than those approved in paragraph (a) of this section; and
 - (4) a detailed description of the alternate procedure, together with:
 - (i) references to published studies, if any, of the applicability of the alternate test procedure to the effluent in question;
 - (ii) Information on known interferences, if any; and
 - (5) a comparability study, using both approved and proposed methods. The study shall consist of 8 replicates of 3 samples from a well mixed waste stream for each outfall if less than 5 outfalls are involved, or from 5 outfalls if 5 or more outfalls are involved. Four (4) replicates from each of the samples must be analyzed using a method approved in paragraph (a) of this section, and four replicates of each sample must be analyzed using the proposed method. This results in 24 analyses per outfall up to a maximum of 120 analyses. A statistical analysis of the data must be submitted that shall include, as a minimum:
 - (i) calculated statistical mean and standard deviation;
 - (ii) a test for outliers at the mean ±3 standard deviations level. Where an outlier is detected, an additional sample must be collected and 8 replicates of the sample must be analyzed as specified above;
 - (iii) a plot distribution with frequency counts and histogram;
 - (iv) a test for equality among with-in sample standard deviation;
 - (v) a check for equality of pooled with-in sample variance with an F-Test;
 - (vi) a t-Test to determine equality of method means; and

copies of all data generated in the study.

Additional information can be obtained by contacting the Bureau of Technical Services & Research (NYSDEC, 50 Wolf Road, Albany, New York 12233 - 3502).

8. DISPOSAL SYSTEM OPERATION AND QUALITY CONTROL

8.1 GENERAL

- a. The disposal system shall not receive or be committed to receive wastes from unapproved sources, nor wastes beyond its design capacity as to volume and character of wastes treated, nor shall the system be materially altered as to: type, degree, or capacity of treatment provided; disposal of treated effluent; or treatment and disposal of separated scum, liquids, solids or combination thereof resulting from the treatment process without written approval of the Department of Environmental Conservation or its designated field office.
- b. The operator shall, at all times, properly operate and maintain all facilities and systems of treatment and control (or related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this order. Proper operation and maintenance also includes as a minimum, the following: 1) A preventive/corrective maintenance program. 2) A site specific action orientated operation and maintenance manual for routine use, training new operators, adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of installed backup or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the order.
- c. The operator shall not discharge floating solids or visible foam.

8.2 BYPASS

a. Definitions:

- (1) "Bypass" means the intentional or unintentional diversion of waste stream(s) around any portion of a treatment facility for the purpose or having the effect of reducing the degree of treatment intended for the bypassed portion of the treatment facility.
- (2) "Severe property damage" means substantial damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which would not reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypass not exceeding limitations:

The operator may allow any bypass to occur which does not cause effluent limitations to be violated, but only if it also is for essential maintenance, repair or replacement to assure efficient and proper operation. These bypasses are not subject to the provisions of pargraph (c) and (d) of this section, provided that written notice is submitted prior to bypass (if anticipated) or as soon as possible after bypass (if unanticipated), and no public health hazard is created by the bypass.

c. Notice:

- Anticipated bypass If the operator knows in advance of the need for a bypass, it shall submit prior written notice, at least forty five (45) days before the date of the bypass.
- (2) Unanticipated bypass The operator shall submit notice of an unanticipated bypass as required in Section 4, paragraph b. of this Part (24 hour notice).

d. Prohibition of bypass:

- (1) Bypass is prohibited, and the Department may take enforcement action against a operator for bypass, unless:
 - bypass was unavoidable to prevent loss of life, personal injury, public health hazard, or severe property damage;
 - (ii) there were no feasible alternatives to the bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal period of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance or if designed and installed backup equipment which could have prevented or mitigated the impact of the bypass is not operating during the bypass; and
 - (iii) the operator submitted notices as required under paragraph (c) of this section and, excepting emergency conditions, the proposed bypass was accepted by the Department.

8.3 UPSET

a. Definition:

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with order effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset:

An upset constitutes an affirmative defense to an action brought for noncompliance with such order effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset:

An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operation logs, or other relevant evidence that:

- (1) an upset occurred and that the operator can Identify the cause(s) of the upset;
- (2) the facility was at the time being properly operated; and
- (3) the operator submitted notice of the upset as required in Section 4, paragraph b of this part (24 hour notice).
- (4) the operator complied with any remedial measures required under Section 4, paragraph d of this part.

d. Burden of proof:

In any enforcement proceeding the operator seeking to establish the occurrence of an upset has the burden of proof.

8.4 SPECIAL CONDITION - DISPOSAL SYSTEMS WITH SEPTIC TANKS

If a septic tank is installed as part of the disposal system, it shall be inspected by the operator or his agent for scum and sludge accumulation at intervals not to exceed one year's duration, and such accumulation will be removed before the depth of either exceeds one-fourth (1/4) of the liquid depth so that no settleable solids or scum will leave in the septic tank effluent. Such accumulation shall be disposed of in an approved manner.

8.5 SLUDGE DISPOSAL

The storage or disposal of collected screenings, sludges, other solids, or precipitates separated from the authorized discharges and/or intake or supply water by the operator shall be done in such a manner as to prevent creation of nuisance conditions or entry of such materials into classified waters or their tributaries, and in a manner approved by the Department. Any live fish, shellfish, or other animals collected or trapped as a result of intake water screening or treatment should be returned to their water body habitat. The operator shall maintain records of disposal on all effluent screenings, sludges and other solids associated with the discharge(s) herein described. The following data shall be compiled and reported to the Department or its designated field office upon request:

- a. the sources of the materials to be disposed of;
- b. the approximate volumes, weights, water content and (if other than sewage sludge) chemical composition;
- the method by which they were removed and transported, including the name and permit number of the waste transporter; and
- d. their final disposal locations.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GENERAL CONDITIONS (Consent Orders)*

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^{*} This version of General Conditions is intended to be incorporated as Appendix A of all Consent Orders for site remediation projects where a State Pollutant Discharge Elimination System permit is not required but where the order authorizes the treatment and discharge of wastewaters to the surface or groundwaters of New York State.

1. GENERAL PROVISIONS

- a. This order, or a true copy, shall be kept readily available for reference at the wastewater treatment facility.
- b. A determination has been made on the basis of a submitted plans, or other available information, that compliance with applicable water quality standards. Satisfaction of these provisions notwithstanding, if operation pursuant to the order causes or contributes to a condition in contravention of State water quality standards, or if the Department determines, on the basis of notice provided by the operator and any related investigation, inspection or sampling, that a modification of the order is necessary to prevent impairment of the best use of the waters or to assure maintenance of water quality standards or compliance with other provisions of ECL, the Department may require such a modification and may require abatement action to be taken by the operator and may also prohibit the noticed act until the order has been modified.
- c. All discharges authorized by this order shall be consistent with the terms and conditions of this order. Facility expansion or other modifications, treatment and disposal system changes which will result in new or increased discharges of pollutants into the waters of the state must be reported by submission of a formal frequest for modification of this order. The discharge of any pollutant, not identified and authorized, or the discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this order shall constitute a violation of the terms and conditions of this order. Facility modifications which Department.
- d. Where the operator becomes aware that he/she failed to submit any relevant facts or submitted incorrect information prior to or in pursuit of this order or in any report to the Department, the operator shall promptly submit such facts or Information.
- e. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the authorized activity in order to maintain compliance with the conditions of this order, unless directed by the Department to continue the activity.
- f. The filing of a request for a modification of this order, or a notification of planned changes or anticipated noncompliance, does not stay any condition of this order.
- g. The operator shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, suspending, or revoking this order, or to determine compliance with this order. The operator shall also furnish to the Department, upon request, copies of records required to be kept by this order.

2. SPECIAL REPORTING REQUIREMENTS

Dischargers must notify the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant (USEPA Priority Pollutants plus phenois, total) which is not specifically controlled in the order, pursuant to General Provision 1 (c) berein. For the purposes of this section, recurrent accidental or unintentional spills or releases on a frequent basis shall be considered to be a discharge.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the order, if that discharge will exceed five times the maximum concentration value reported for that pollutant in the information submitted prior to this order; or the level established by the Department.
- c. That they will begin to use any toxic pollutant which was not reported prior to this order and which is being or may be discharged to waters of the state.

3. EXCLUSIONS

a. The Issuance of this order by the Department and the receipt thereof by the operator does not supersede, revoke or rescind an order or modification thereof on consent or determination by the Commissioner issued heretofore by the Department or any of the terms, conditions or requirements contained in such order or modification thereof unless specifically intended by said order.

- b. The issuance of this order does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations; nor does it obviate the necessity of obtaining the assent of any other jurisdiction as required by law for the discharge authorized.
- c. Unless specifically authorized in this order, the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters is not approved.

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- b. Immediate and twenty-four hour reporting. The operator shall report <u>any</u> noncompliance which may endanger health or the environment. Any unusual situation, caused by a deviation from normal operation or experience (e.g. upsets, bypasses, inoperative treatment process units, spills or illegal chemical discharges or releases to the collection system) which create a potentially hazardous condition shall be orally reported immediately. Other information shall be provided orally within 24 hours from the time he or she becomes aware of the circumstances. A written noncompliance report shall also be provided within five (5) days of the time the operator becomes aware of the circumstances. The written noncompliance report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent the noncompliance and its reoccurrence.
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- have access to and copy, at reasonable times, any records that must be kept under the conditions of this
 order, including records maintained for purposes of operation and maintenance;
- Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order, and
- d. sample or monitor at reasonable times, for the purposes of assuring compliance with this order or as otherwise authorized by the Environmental Conservation Law, any substances or parameters at any location.

6. SPECIAL PROVISIONS - NEW OR MODIFIED DISPOSAL SYSTEMS

- a. Prior to construction of any new or modified waste disposal system or modification of a facility generating wastewater which could alter the design volume of, or the method or effect of treatment or disposing of the wastes from an existing waste disposal system, the operator shall submit to the Department or its designated field office for review, an approvable engineering report, plans, and specifications which have been prepared by a person or firm Ilcensed to practice Professional Engineering In the State of New York.
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- c. The construction of the above new or modified disposal system shall be under the general supervision of a person or firm licensed to practice Professional Engineering in New York State. Upon completion of construction, that person or firm shall certify to the Department or its designated field office that the system has been fully completed in accordance with the approved engineering report, plans and specifications and letter of approval; and the operator shall receive written acceptance of such certificate from the Department or designated field agency prior to commencing discharge.
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 - (i) a president, secretary, treasurer, or a vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making function for the corporation, or
 - (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) for a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) for a municipality, state, federal, or other public agency: by either a principal or executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or
 - (4) a duly authorized representative of the person described in items (1), (2), or (3). A person is a duly authorized representative only if:
 - (i) the authorization is made in writing by a person described in paragraph (a)(1), (2), or (3) of this section;
 - (ii) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - (iii) the written authorization is submitted to the Department.
- b. Changes to authorization: If an authorization under subparagraph (a)(4) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subparagrapph (a)(4) of this section must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- c. Certification: Any person signing a report shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision, in accordance with a system, designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the order or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

7.3 RECORDING OF MONITORING ACTIVITIES AND RESULTS

a. The operator shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this order, and records of all data used to complete the application for this order, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

- b. Records of monitoring information shall include:
 - (1) the date, exact place, and time of sampling or measurements;
 - (2) the individual(s) who performed the sampling or measurements;
 - (3) the date(s) analyses were performed;
 - (4) the individual(s) who performed the analyses;
 - (5) the analytical techniques or methods used; and
 - (6) the results of such analyses.

7.4 TEST AND ANALYTICAL PROCEDURES

- a. Monitoring and analysis must be conducted using test procedures promulgated, pursuant to 40 CFR Part 136, except:
 - (1) should the Department require the use of a particular test procedure, such test procedure will be specified in this order.
 - (2) should the operator desire to use a test method not approved herein, prior Department approval is required, pursuant to paragraph (b) of this section.
- b. Application for approval of test procedures shall be made to the Director of DEC's Division of Water, and shall contain:
 - (1) the name and address of the applicant or the responsible person making the discharge, identification of this particular order and the telephone number of applicant's contact person;
 - (2) the names of the pollutants or parameters for which an alternate testing procedure is being requested, and the monitoring location(s) at which each testing procedure will be utilized;
 - (3) Justification for using test procedures, other than those approved in paragraph (a) of this section; and
 - (4) a detailed description of the alternate procedure, together with:
 - (i) references to published studies, if any, of the applicability of the alternate test procedure to the effluent in question;
 - (ii) Information on known interferences, if any; and
 - (5) a comparability study, using both approved and proposed methods. The study shall consist of 8 replicates of 3 samples from a well mixed waste stream for each outfall if less than 5 outfalls are involved, or from 5 outfalls if 5 or more outfalls are involved. Four (4) replicates from each of the samples must be analyzed using a method approved in paragraph (a) of this section, and four replicates of each sample must be analyzed using the proposed method. This results in 24 analyses per outfall up to a maximum of 120 analyses. A statistical analysis of the data must be submitted that shall include, as a minimum:
 - (i) calculated statistical mean and standard deviation;
 - (ii) a test for outliers at the mean ±3 standard deviations level. Where an outlier is detected, an additional sample must be collected and 8 replicates of the sample must be analyzed as specified above;
 - (iii) a plot distribution with frequency counts and histogram;
 - (iv) a test for equality among with-in sample standard deviation;
 - (v) a check for equality of pooled with-In sample variance with an F-Test;
 - (vi) a t-Test to determine equality of method means; and

copies of all data generated in the study.

Additional information can be obtained by contacting the Bureau of Technical Services & Research (NYSDEC, 50 Wolf Road, Albany, New York 12233 - 3502).

8. DISPOSAL SYSTEM OPERATION AND QUALITY CONTROL

8.1 GENERAL

- a. The disposal system shall not receive or be committed to receive wastes from unapproved sources, nor wastes beyond its design capacity as to volume and character of wastes treated, nor shall the system be materially altered as to: type, degree, or capacity of treatment provided; disposal of treated effluent; or treatment and disposal of separated scum, liquids, solids or combination thereof resulting from the treatment process without written approval of the Department of Environmental Conservation or its designated field office.
- b. The operator shall, at all times, properly operate and maintain all facilities and systems of treatment and control (or related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this order. Proper operation and maintenance also includes as a minimum, the following: 1) A preventive/corrective maintenance program. 2) A site specific action orientated operation and maintenance manual for routine use, training new operators, adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of installed backup or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the order.
- c. The operator shall not discharge floating solids or visible foam.

8.2 BYPASS

a. Definitions:

- (1) "Bypass" means the intentional or unintentional diversion of waste stream(s) around any portion of a treatment facility for the purpose or having the effect of reducing the degree of treatment intended for the bypassed portion of the treatment facility.
- (2) "Severe property damage" means substantial damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which would not reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations:

The operator may allow any bypass to occur which does not cause effluent limitations to be violated, but only if it also is for essential maintenance, repair or replacement to assure efficient and proper operation. These bypasses are not subject to the provisions of pargraph (c) and (d) of this section, provided that written notice is submitted prior to bypass (if anticipated) or as soon as possible after bypass (if unanticipated), and no public health hazard is created by the bypass.

c. Notice:

- (1) Anticipated bypass If the operator knows in advance of the need for a bypass, it shall submit prior written notice, at least forty five (45) days before the date of the bypass.
- (2) Unanticipated bypass The operator shall submit notice of an unanticipated bypass as required in Section 4, paragraph b. of this Part (24 hour notice).

d. Prohibition of bypass:

- (1) Bypass is prohibited, and the Department may take enforcement action against a operator for bypass, unless:
 - bypass was unavoidable to prevent loss of life, personal injury, public health hazard, or severe property damage;
 - (ii) there were no feasible alternatives to the bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal period of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance or if designed and installed backup equipment which could have prevented or mitigated the impact of the bypass is not operating during the bypass; and
 - (iii) the operator submitted notices as required under paragraph (c) of this section and, excepting emergency conditions, the proposed bypass was accepted by the Department.

8.3 UPSET

a. Definition:

"Upset" means an exceptional incident in which there is unintentional and temporary noncompilance with order effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompilance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset:

An upset constitutes an affirmative defense to an action brought for noncompliance with such order effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset:

An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operation logs, or other relevant evidence that:

- (1) an upset occurred and that the operator can identify the cause(s) of the upset;
- (2) the facility was at the time being properly operated; and
- (3) the operator submitted notice of the upset as required in Section 4, paragraph b of this part (24 hour notice).
- (4) the operator complied with any remedial measures required under Section 4, paragraph d of this part.

d. Burden of proof:

In any enforcement proceeding the operator seeking to establish the occurrence of an upset has the burden of proof.

8.4 SPECIAL CONDITION - DISPOSAL SYSTEMS WITH SEPTIC TANKS

If a septic tank is installed as part of the disposal system, it shall be inspected by the operator or his agent for scum and sludge accumulation at intervals not to exceed one year's duration, and such accumulation will be removed before the depth of either exceeds one-fourth (1/4) of the liquid depth so that no settleable solids or scum will leave in the septic tank effluent. Such accumulation shall be disposed of in an approved manner.

8.5 SLUDGE DISPOSAL

The storage or disposal of collected screenings, sludges, other solids, or precipitates separated from the authorized discharges and/or intake or supply water by the operator shall be done in such a manner as to prevent creation of nuisance conditions or entry of such materials into classified waters or their tributaries, and in a manner approved by the Department. Any live fish, shellfish, or other animals collected or trapped as a result of intake water screening or treatment should be returned to their water body habitat. The operator shall maintain records of disposal on all effluent screenings, sludges and other solids associated with the discharge(s) herein described. The following data shall be compiled and reported to the Department or its designated field office upon request:

- a. the sources of the materials to be disposed of;
- b. the approximate volumes, weights, water content and (if other than sewage sludge) chemical composition;
- the method by which they were removed and transported, including the name and permit number of the waste transporter; and
- d. their final disposal locations.

FFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

. 33,

the period beginning __Effective Date of Consent Order #A702659106 and lasting until ___ June 30, 1992 or as otherwise specified in Order.

the discharges from the permitted facility shall be limited and monitored by the permitee as Minimum

specified below:				Monitofing He	curamanta
วินท์ลli Numbar &	Discharge	Limitations		Measutement	Sample
Efficient parameters	Daily Ave.	Dally Max.	Unit3	Fraquancy	Type
001 Groundwatar					
Flow	Monitor	Montton	gpd	Continuous	Recorder
Senzena	Monitor	0,05	15/d	Weakly	GRAB
Banzana .	Monitor	0.03	<u>mg/1</u>	Waekly	
1,2-Dichloroethane	Monitor	0.15	1b/d	Haakly	11
1.2-Dichlorosthane	Monitor	0, 03	<u>59/1</u>	Haakly	17
1.2-Dichioropropane	Monitor	0.1 5	10/3	Haskly	11
1,2-Dichloroprogane	Monitor	0.03	<u>mq/1</u>	Waakly	11
Ethylbenzana	Monitor	0. 05	15/0	Weakly	†† 3
Ethvlbenzane	Monitor	0.01	ms/1	Heekly	11
1,1,2,2-Tetrachioroethane	Monitor	0.15	10/3	Waakly	11
1,1,2,2-Tesrachloresthans	Moniter	a. 03	<u>mg/1</u>	Weakly	11
Toluena	Monitor	Ũ. 05	15/G	Waak1y	11
Trivane	Monitor	0.01	mg/1	Waakly	11
1 1-Trichloroathana	Monitor	0.05	16/4	Waskly	11
1,1,1-Trichlorosthage	Monitor	0, 01	mg/l	Weekly	11
Trichlerestnylens	Monitor	0.05	To/d	Haakiy	t1 11
Trichiorosthylane	Monitor	0.01	mg/1	Waekiy	**
Chloroform	Monitor	0.15	15/0	Weekly	11
Chloroform	Monitor	0.03	ma/1	Weekly	11
1,1-01chiorcathane	Monitor	0.03	16/0	Weakly	.''
1,1-Dichloroethana	Monitor	0.03	mg/l	Haekly	11
Tetrachiorosthylene	Monitor	0.15	15/a	Weekly	11
Tetrachlorcathylene	Monitor	0.03	mg/1	Weekly	11

^{*} Required turnaround on analysis shall be a maximum of seven days.

Copies of the results should be submitted to the DEC within two working days of completion of the receipt of the analysis.

Regiona	Authorization	No.:
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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

and lasting until June 30, 1992 or as otherwise specified in Order.

the discharges from the permitted facility shall be limited and monitored by the permitee as specified below:

				Monitoring R	
Outfail Number & Effluent parameters	Dischargi Daily Ave.	e Umitations Daily Max.	Units	Measurement Frequency	Sample Type
001-Groundwater					
1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,3-Dichloropenzene 1,3-Dichlorobenzene 1,1-Dichloroethylene 1,1-Dichloroethylene Xylenes, Total Xvleres, Total Mathylene Chloride Mathylene Chloride Promochloromethane Bromochloromethane Naphthalene Naphthalene	Monitor	0.15 0.03 0.05 0.05 0.05 0.05 0.05 0.05 0.0	15/d mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Weekly Weekly Weekkly Weekkly Weekkly Weekkly Weekkly Weekkly Weekkly Weekkly Weekkly	GRAS II II II II II II II II II
Cls 1,2-Eichlorgethame Trans 1,2 Dichlorgethame	Monitor Monitor Monitor Monitor	ି . ୦୫ ି . ୦। -ି . ୦୫ ି . ୦।	15/d mg/1 15/d mg/1	Weekly Weekly Weekly Weekly	11 0 - H : - O : 17

^{*} Required turnaround on analysis shall be a maximum of seven days.

Copies of the results should be submitted to the DEC within two working days of completion of the receipt of the analysis.

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CNS OF DAILY AVERAGE AND DAILY MAXIMUM

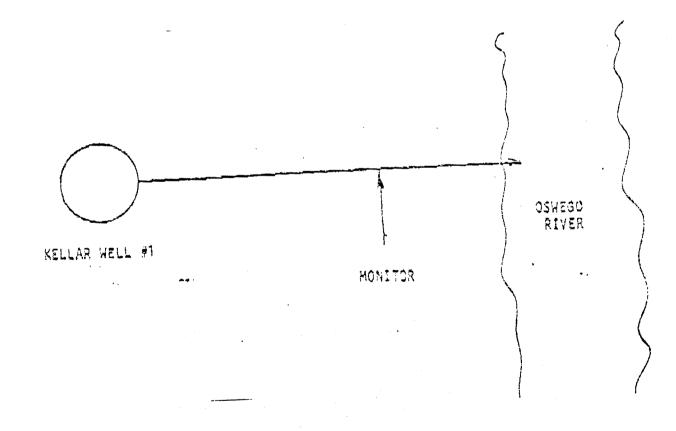
The daily average discharge is the total discharge by weight or in other appropriate units as apecified herein, during a signals month divided by the number of days in the month that the facility was operating. Where less than daily sampling required, the daily average discharge and the determined by the summation of all the measured daily alsonarges in opropriete units as specified herein divided by the number of days during the balender month when measurements were rads.

The daily maximum discharge means the total discharge by weight or in other appropriate units as epecified harein. juring any calendar day.

AONITORING LOCATIONS

Samples and measurements, to comply with monitoring requirements apacified in this authorization, shall be taken at the location(2) indicated below: (Snow sempling locations and outfalls with exetch or flow diagram as appropriate)

From affluent prior to discharge to river.



STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the
Development and Implementation
of a Remedial Program for an
Inactive Hazardous Waste Disposal
Site, Under Article 27, Title 13,
and Article 71, Title 27 of the
Environmental Conservation Law
of the State of New York by

ORDER ON CONSENT

INDEX #A7-0322-9411 SITE # 7-38-029

MILLER BREWING COMPANY, Respondent.

WHEREAS,

- 1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is issued pursuant to the Department's authority under, <u>inter alia</u>, ECL Article 27, Title 13 and ECL 3-0301.
- 2. A. Miller Brewing Company (the "Respondent") is a corporation organized and existing under the laws of the State of Wisconsin and is authorized to do business in the State of New York. The Container Division of Miller Brewing Company formerly operated a can making facility in the Town of Volney, Oswego County (the "Site"). The Site was sold to the Reynolds Metals Company, effective November 1, 1993. The Site is located approximately 1200 feet southeast of the Fulton, New York municipal boundary, approximately 1000 feet northeast of the Oswego River and approximately 900 feet south of New York State Route 481. A City of Fulton ("the City") municipal drinking water wellfield is located hydrogeologically downgradient of the facility.
- B. Respondent formerly had in use a spill containment tank installed near the northwest corner of the facility ("the Spill Area"), which was found at the time of its excavation in the Spring of 1986 to have been leaking.
- C. A soil gas survey conducted during 1990 defined two potential areas of additional contamination: an area at the north corner of the facility and an area at the south corner of the facility, both of which were formerly used for drum storage. An investigation of these areas showed a moderate level of contamination at the south corner of the facility located on the Site.

- D. In April of 1991, a second spill area was identified within the facility during the excavation of a sump. Respondent investigated this area as part of the Remedial Investigation ("RI").
- E. Laboratory analyses of ground water samples from monitoring wells installed at the Site have detected the presence of methylene chloride, 1,1-dichloroethylene, 1,1-dichloroethane, 1,1,1-trichloroethane ("TCA"), tetrachloroethylene and other contaminants.
- F. A contaminant plume from the former spill containment tank was identified in the aquifer at the Site. TCA and other contaminants identified at the Site have been detected at the municipal water well field. Respondent pumped two municipal drinking water wells, Kellar Well Number 2 ("K-2") and Municipal Well Number 2 ("M-2"), to the Oswego River from April of 1990 until June of 1992 when levels of contaminants in the two wells began to increase. In June 1992, the water then went into the municipal water treatment system.
- G. A third municipal drinking well, Kellar Well Number 1 ("K-1"), provides the City with approximately one-third of its total water supply. Sampling at K-1 has shown sporadic contamination by volatile organics.
- H. The Department alleges that Respondent is a responsible party with respect to contamination migrating toward and detected at K-1, K-2 and M-2.
- I. Respondent and the Department executed Order on Consent #A701118704, effective January 22, 1988, (the "1988 IRM Order"), pursuant to which Respondent implemented an interim remedial measures program intended to treat ground water at the Site to acceptable levels. The interim remedial program included the installation of three ground water recovery wells and treatment of the contaminated ground water by an air stripper. The program also required the periodic monitoring of the monitoring wells on the Site to assess the effectiveness of the interim remedial program.
- J. Respondent and the Department executed an Amendment to Order on Consent #A701118704, effective March 29, 1990, (the "Amendment"), pursuant to which Respondent implemented an Interim Remedial Measures Program which included the pumping of M-2 into the Oswego River.
- K. Respondent and the Department executed Order on Consent #A702659106, effective August 12, 1991 (the "1991 IRM Order"), pursuant to which Respondent implemented an Interim Remedial Program in which Respondent obtained the necessary

design and construction approvals from both the City of Fulton and the New York State Department of Health to construct a long term ground water treatment system making use of air stripper technology to treat water pumped from the wells K-1, K-2 and M-2 before such water is introduced into the City's drinking water supply. Upon substantial completion, ownership of this facility was transferred to the City of Fulton and under paragraph VIII of the 1991 IRM Order, the Respondent agreed to be responsible for the "additional costs" (as defined in paragraph VIII) required for the City's operation and maintenance of the Treatment System until the obligation is terminated in accordance with Paragraph XVII of the 1991 IRM Order. All terms of the 1991 IRM Order remain in full force and effect.

- L. Pursuant to paragraph XXIX of the 1991 IRM Order, upon the effective date of said Order, all terms and conditions of the Amendment, except paragraph XIV (the provision requiring Respondent to indemnify the Department and hold it harmless), terminated.
- M. Respondent and the Department executed a Remedial Investigation/Feasibility Study ("RI/FS") Order on Consent #A7-0227-90-04 (the "RI/FS Order"), effective April 23, 1990, pursuant to which, Respondent performed an RI/FS for the Site.
- N. The Respondent has submitted and the Department has approved a RI Report date July 1993, a RI Report Addendum dated July 1994, and a FS dated July 1994.
- O. The Department affirms that Respondent has fulfilled its obligations under and imposed by the RI/FS Consent Order with the exception of any obligation to reimburse the Department for expenses pursuant to Paragraph XI of the RI/FS Order.
- 3. The Department alleges that the Site is an inactive hazardous waste disposal site, as that term is defined at ECL 27-1301.2, and presents a significant threat to the public health or environment. The Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 7-38-029. The Department has classified the Site as a Classification "2" pursuant to ECL 27-1305.4.b.
- 4. A. Pursuant to ECL 27-1313.3.a, whenever the Commissioner of Environmental Conservation (the "Commissioner") "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at

- such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department, at such site, and (ii) to implement such program within reasonable time limits specified in the order."
- B. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.
- C. The Department also has the power, <u>inter alia</u>, to provide for the prevention and abatement of all water, land, and air pollution. <u>See, e.g.</u>, ECL 3-0301.1.i.
- 5. Following a period of public comment, the Department selected a final remedial alternative for the Site in a Record of Decision ("ROD") issued on March 20, 1995. The ROD, attached to this Order as Appendix "A," is incorporated as an enforceable part of this Order.
- 6. The Department and Respondent agree that the goals of this Order are for Respondent to (i) develop and implement, in accordance with the ROD, an inactive hazardous waste disposal site remedial program ("Remedial Program") for the Site that shall include design and implementation, and operation, maintenance and monitoring of the selected remedial alternative; and (ii) reimburse the State's administrative costs to the extent set forth in this Order.
- 7. Respondent, having waived its right to a hearing herein as provided by law, has consented to the issuance and entry of this Order without any adjudication of fact or law and agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms. Respondent's consent to and compliance with this Order does not constitute, and shall not be construed as, an admission of liability of any kind or an admission by Respondent of law or fact or of the applicability of any law to conditions at the Site.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Remedial Design Contents

A. Within 120 days after the effective date of this Order, Respondent shall submit to the Department a remedial design to implement the remedial alternative for the Site selected by the Department in the ROD (the "Remedial")

- Design"). The Remedial Design shall be prepared by and have the signature and seal of a professional engineer who shall certify that the Remedial Design was prepared in accordance with this Order.
- B. The Remedial Design shall include the following:
- (1) A detailed description of the remedial objectives and the means by which each element of the selected remedial alternative will be implemented to achieve those objectives, including, but not limited to:
- a. the construction and operation of any structures;
- b. the collection, destruction, treatment, and/or disposal of hazardous wastes and substances and their constituents and degradation products, and of any soil or other materials contaminated thereby;
- c. the collection, destruction, treatment, and/or disposal of contaminated ground water, leachate, and air;
- d. physical security and posting of the Site;
- e. quality control and quality assurance procedures and protocols to be applied during implementation of the Remedial Construction; and
- f. monitoring which integrates needs which are present on-Site and off-Site during implementation of the Department-selected remedial alternative;
- (2) "Biddable Quality" documents for the Remedial Design including, but not limited to, documents and specifications prepared, signed, and sealed by a professional engineer. These plans shall satisfy all applicable local, state and federal laws, rules and regulations;
- (3) A time schedule to implement the Remedial Design;
- (4) The parameters, conditions, procedures, and protocols to determine the effectiveness of the Remedial Design, including a schedule for periodic sampling of ground water monitoring wells on-Site and off-Site;
- (5) A description of operation, maintenance, and monitoring activities to be undertaken after the

Department has approved construction of the Remedial Design, including the number of years during which such activities will be performed (where appropriate) and a specific description of the criteria to be used to decide when an operation of the remedy may be discontinued;

- (6) A contingency plan to be implemented if any element of the Remedial Design fails to achieve any of the objectives set forth in Section 6.0: REMEDIATION GOALS of the ROD;
- (7) A health and safety plan for the protection of persons at and in the vicinity of the Site during construction and after completion of construction. This plan shall be prepared in accordance with 29 CFR 1910 by a certified health and safety professional; and
- (8) A citizen participation plan which incorporates appropriate activities outlined in the Department's publication, "New York State Inactive Hazardous Waste Citizen Participation Plan," dated August 30, 1988, and any subsequent revisions thereto, and 6 NYCRR Part 375.

II. Remedial Construction

- A. Respondent shall commence construction of the Department-approved Remedial Design in accordance with the schedule set forth within the Department-approved Remedial Design.
- B. Respondent shall implement the Remedial Design in accordance with the Department-approved Remedial Design.
- C. (1) During the implementation of all construction activities identified in the Remedial Design, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.
- (2) The on-Site air stripper system, which is required to be operated under the terms of the 1988 IRM Order, shall continue in operation during the installation of the new ground water collection system and treatment facility. The contractor performing the Remedial Construction shall, at a pre determined point in the construction process established in its construction schedule, discontinue the use of the existing air stripper system to enable the contractor to complete the remedial construction. Upon the discontinuance of use of the air stripper system, all terms and conditions of the IRM Order, except paragraph X (the provision requiring Respondent to indemnify the Department and hold it harmless), shall terminate.

- D. Within 90 days after completion of the construction activities identified in the Department-approved Remedial Design, Respondent shall submit to the Department a detailed post-remedial operation and maintenance plan ("O&M Plan"), "as-built" drawings and a final engineering report (each including all changes made to the Remedial Design during construction), and a certification that the Remedial Design was implemented and that all construction activities were completed in accordance with the Department-approved Remedial Design and were personally witnessed by him or her or by a person under his or her direct supervision. The O&M Plan, "as-built" drawings, final engineering report, and certification must be prepared, signed, and sealed by a professional engineer.
- E. Upon the Department's approval of the O&M Plan, Respondent shall implement the O&M Plan in accordance with the requirements of the Department-approved O&M Plan.
- F. After receipt of the "as-built" drawings, final engineering report, and certification that all construction activities have been completed in compliance with the Department-approved Remedial Design, the Department shall notify Respondent in writing of its acceptance and approval of such drawings, report, and certification.
- G. Prior to its acceptance and approval of the engineer's certification that construction was completed in accordance with the approved Remedial Design, the Department may require the Respondent to modify the Remedial Design and Construction if the Department determines that such modification is necessary due to:
 - (1) environmental conditions on-Site or off-Site which are related to the presence of hazardous wastes at the Site and were unknown to the Department at the time of its approval of the Remedial Investigation Report Addendum, or
 - (2) information received, in whole or in part, after the Department's approval of the Remedial Investigation Report Addendum, where such unknown environmental conditions or such information indicates that the Remedial Program is not protective of human health or the environment.
- H. In the event the Department determines that a modification under subparagraph II.G is required, it shall advise the Respondent in writing and set forth (i) the basis for its determination made under subparagraph II.G and (ii) the scope of the modification which the Department wants to be implemented. The Respondent may challenge the Department's

determination under the dispute resolution provisions of this Order in subparagraph IV.B. within 30 days after its receipt of the Department's written determination by service of a statement, setting forth the basis of its disagreement.

I. In the event Respondent is required to modify the Remedial Design and Construction in accordance with the terms of this Order, it shall perform the work in accordance with a reasonable time schedule which the Department, after consultation with Respondent, shall prescribe. The Department's review of the Respondent's submittals shall be subject to the provisions of subparagraphs IV A and B.

III. Progress Reports

A. Remedial Construction.

During the period of Remedial Construction, Respondent shall submit to the parties identified in Subparagraph XI.B in the numbers specified therein copies of written monthly progress reports that:

- (1) describe the actions which have been taken toward implementation of the remedial alternative selected in the ROD during the previous month;
- (2) include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;
- (3) identify all work plans, reports, and other deliverables required by this Order that were completed and submitted during the previous month;
- (4) describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next month and provide other information relating to the progress of the Remedial Construction at the Site;
- (5) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for the Remedial Construction, and efforts made to mitigate those delays or anticipated delays; and
- (6) include modifications to the Remedial Design that Respondent has proposed to the Department or that the Department has approved.

Respondent shall submit these progress reports to the Department by the tenth day of every month beginning with the first full month after Remedial Construction has begun

following the effective date of this Order until the Department approves the engineer's certification.

Respondent also shall allow the Department to attend, and shall provide the Department at least seven days advance notice of, any of the following: job progress meetings, the substantial completion meeting and inspection and the final completion meeting and inspection.

B. Groundwater Monitoring

Following the termination of the 1988 IRM Order under subparagraph II.C.(2), the Respondent shall continue to perform the groundwater sampling and analysis program required under the 1988 IRM Order during the remainder of the period of Remedial Construction. The period of Remedial Construction shall end on the date of the Respondent's receipt of the Department's written acceptance and approval of the "as-built" drawings, the final engineering report, and certification that the Remedial Construction was completed in accordance with the Department-approved Remedial Design. Respondent shall submit the results of the analyses on a monthly basis to Michael DiPietro, the Department's Project Manager, at the address set forth in Paragraph XI of this Order.

C. Operation and Maintenance

In accordance with the O&M plan, Respondent shall submit such reports as required, including, all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents since the previous report, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent.

IV. Review of Submittals

A. (1) The Department shall review each of the submittals Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of the submittal, except for the submittal discussed in Subparagraph I.B.7. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

(2) a. If the Department disapproves a submittal, it shall so notify Respondent in writing and shall

specify the reasons for its disapproval. Within 30 days, or such longer period of time as may be agreed to in writing by the Department, after receiving written notice that Respondent's submittal has been disapproved, Respondent shall make a revised submittal to the Department that addresses all of the Department's stated reasons for disapproving the first submittal.

- b. After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval. If the Department disapproves the revised submittal, Respondent shall be in violation of this Order unless Respondent invokes the dispute resolution procedures set forth in subparagraph IV.B of this Order. If Respondent does not invoke dispute resolution procedures, the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.
- If the Department disapproves a revised submittal pursuant to subparagraph IV.A.(2), or if Respondent fails to challenge a Department determination under subparagraphs II.H. or IV.C.(1), or if Respondent fails to reimburse the State's expenses pursuant to paragraph VII, Respondent shall be in violation of this Order unless, within 30 days of receipt of the Department's notice of disapproval, demand for modification, or invoice, Respondent serves on the Department's Director of Hazardous Waste Remediation ("the Director") a written statement of the issues in dispute, the relevant facts upon which the dispute is based, and factual data, analysis or opinion supporting its position, and all supporting documentation on which Respondent relies (hereinafter called the "Statement of Position"). The Department shall serve its Statement of Position, including supporting documentation no later than ten business (10) days after receipt of Respondent's Statement of Position. time periods for exchange of Statements of Position may be shortened upon mutual agreement of the parties.
- (2) Respondent shall be available to meet with the Director and the Department within ten business (10) days of Respondent's receipt of the Department's Statement of Position (the "meeting").
- (3) An administrative record of any dispute under this paragraph shall be maintained by the Department. The record shall include the Statement of Position of each party and any relevant information, including any relevant documentation submitted by either party up to and including the time of the meeting pursuant to subparagraph IV.B.(2).

The record shall be available for review of all parties and the public.

- (4) In review by the Director of any dispute pursued under this paragraph, Respondents shall have the burden of establishing by a preponderance of the evidence that there is no rational basis for the Department's position based upon the entire administrative record.
- (5) Upon review of the administrative record as developed pursuant to subparagraph IV.B.(3), the Director shall issue a final decision and order resolving the dispute. Respondent shall comply with such final decision and order, unless within 30 days of receipt of such final decision and order, Respondent commences an action under Article 78 of the Civil Practice Law and Rules of New York (CPLR) challenging such final decision and order. The period of time within which Respondent must comply with the Director's final decision and order, shall be specified by the Director in his final decision and order.
- (6) If Respondent commences an action under Article 78 of the CPLR, Respondent shall revise the submittal, undertake the required modification, or reimburse the State's expenses in accordance with the court's decision in this matter.
- (7) a. After receipt of the revised submittal or work plan to implement the Department-demanded modification, the Department shall notify the Respondent in writing of its approval or disapproval. If the revised submittal or work plan to implement the Department-demanded modification fails to comply with the Director's final decision and order (or, if applicable, the court's decision) and the Department disapproves the revised submittal or the work plan to implement the Department-demanded modification for that reason, the Respondent shall be in violation of this Order and the ECL.
- b. If Respondent fails to comply with a final decision and order of the Director (or, if applicable the court's decision) requiring Respondent to reimburse the State's expenses, Respondent shall be in violation of this Order and the ECL.
- (8) a. The invocation of formal dispute resolution procedures under paragraph IV.B. shall suspend and toll only those obligations under this Order which are in dispute or necessarily dependent on resolution of the matter(s) in dispute. Respondent' filing of a petition for review under Article 78 of the CPLR shall not stay or excuse performance of work or timely transmission of submittals with

respect to the disputed issues, except by agreement of the Department or by order of the court upon Respondent's application. Respondent shall have the burden of establishing before the court the necessity or appropriateness of such stay or excuse by a preponderance of the evidence that Respondent's position should prevail.

- b. The invocation of the procedures stated in this paragraph shall constitute an election of remedies by the Respondent, and such election of this remedy shall constitute a waiver of any and all other remedies which may otherwise be available to Respondent regarding the issue in dispute.
- (9) Nothing in this Order shall be construed to allow any dispute by Respondent regarding the validity of the ROD's provisions.
- C. (1) Prior to the Department's final approval of the as-built plans, Respondent shall modify and/or amplify and expand a submittal upon the Department's direction to do so if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts received after the date of the ROD, that further work is necessary to attain the remedial objectives identified in the ROD. The Respondent may challenge the Department's determination that further work is necessary by service of the required written statement in accordance with subparagraph IV.B of this Order within 30 days after its receipt of the Department's written determination.
- (2) In the event the Respondent is required to modify and/or amplify and expand a submittal under subparagraph IV.C.(1), the Department's review of the submittal shall be subject to the provisions of subparagraphs IV.A & B of this Order.

V. Compliance

- A. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL.
- B. Respondent shall not suffer any penalty under this Order or be subject to any proceeding or action if it cannot comply with any requirement hereof because of war, riot, or other condition as to which negligence or willful misconduct on the part of Respondent was not a proximate cause. Respondent shall, within five business days of when it obtains knowledge of any such condition, notify the Department in writing. Respondent shall include in such notice the measures taken and to be taken by Respondent to prevent or minimize any delays and shall request an appropriate extension

or modification of this Order. Failure to give such notice within such five business day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have the burden of proving that an event is a defense to compliance with this Order.

Increased costs or expenses of any work to be performed under this Order, the financial inability of Respondent to perform such work and the failure of Respondent to make complete and timely application for any required approval or permit do not constitute conditions or events warranting the relief set forth in subparagraph V.B.

VI. Entry upon Site

Respondent hereby consents to the entry upon the Site or areas in the vicinity of the Site which may be under the control of Respondent by any duly designated employee, consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure Respondent's compliance with this Order. The Department recognizes that at the time this Order is issued, Respondent does not own or operate the Site. Respondent agrees that it will not prevent the Department from entering, for the purposes described in this Paragraph, those areas of the Site or the adjacent properties to which Respondent has been granted access.

VII. Payment of State Costs

- A. Respondent shall pay to the Department a sum of money which shall represent reimbursement for the State's expenses including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs incurred by the State of New York for work related to the Site from March 9, 1995, as well as for reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order.
- B. Such payment shall be made by check payable to the Department of Environmental Conservation within 30 days of receipt of an itemized invoice from the Department. Payment shall be sent to the Bureau of Program Management, Division of Hazardous Waste Remediation, N.Y.S.D.E.C., 50 Wolf Road, Albany, NY 12233-7010.
- C. Itemization of the costs shall include an accounting of personal services indicating the employee name, title, biweekly salary, and time spent (in hours) on the project

during the billing period, as identified by an assigned time and activity code. This information shall be documented by quarterly reports of Direct Personal Service. The Department's approved fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel, contractual) and shall be documented by expenditure reports. Respondent may request an appointment to review supporting documentation within 30 days of receipt of an itemized invoice from the Department. Payment of such invoice shall be made within 30 days of the review of supporting documentation.

Respondent can object to any portion of the costs as being inconsistent with this Order or the NCP or the result of clerical errors and any such disagreement shall be subject to the dispute resolution procedures set forth in Paragraph IV (B) of this Order. Respondent's obligation under this Paragraph shall be limited as follows: (i) a maximum of \$100,000.00 for the first 24 months of the design and construction phase which began on March 9, 1995 (T&A Code B550), and (ii) \$5,000.00 per year for the O&M phase. design and construction phase exceeds 24 months, there will be no limitation on additional costs for that phase.) Notwithstanding anything in this Order to the contrary, in the event the Respondent exercises its right to review the supporting documentation for an invoice, its right to seek dispute resolution shall be extended until 20 days after the date of review.

VIII. <u>Department Reservation of Rights</u>

- A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, or administrative rights or authorities.
- B. If, after review, the Department accepts and approves the engineer's certification that construction of the Remedial Program was completed in accordance with the approved Remedial Design, such acceptance and approval shall constitute a full and complete satisfaction and release of each and every claim, demand, remedy or action whatsoever against Respondent, its successors and assigns, which the Department has or may have pursuant to Article 27, Title 13 of the ECL relative to or arising from the disposal of hazardous wastes at the Site. Such release and satisfaction, however, does not extend to, nor include the following: the implementation of a contingency plan required pursuant to Paragraph I.B.6; Respondent's indemnification obligations under the provisions of paragraph IX of this Order; Respondent's obligations for the future Operation and Maintenance of the Site under subparagraph II.E.

of this Order; the Respondent's obligation for reimbursement of State expenditures at the Site under paragraph VII of this Order; and any Natural Resource Damage claims that may arise. The Department specifically reserves all of its rights concerning, and any such release and satisfaction shall not extend to, any investigation or remediation the Department deems necessary due to:

- (1) environmental conditions on-Site or off-Site which are related to the disposal of hazardous waste at the Site and were unknown to the Department at the time of its approval of the Remedial Investigation Report Addendum; or
- (2) information received, in whole or in part, after the Department's approval of the Remedial Investigation Report Addendum, which indicates that the Remedial Program is not protective of human health or the environment. The Department shall notify the Respondent in writing of its receipt of such information and its basis for determining that the Remedial Program is not protective of human health and the environment.

This release shall inure only to the benefit of the Respondent, its successors and assigns, with respect to the aforesaid matter.

Nothing herein shall be construed as affecting in any way, legal or equitable rights, claims or any causes of action that the Department may have against anyone other than Respondent, its successors and assigns.

C. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

IX. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns. Respondent shall not indemnify the Department or the State of New York for gross negligence or willful misconduct on the part of the State of New York, the Department or their representatives and employees.

X. Public Notice

Within 30 days after the effective date of this Order, Respondent shall file a Declaration of Covenants and Restrictions with the Clerk of the County wherein the Site is located to give all parties who may acquire any interest in the Site notice of this Order.

XI. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

Communication from Respondent shall be sent to:

Michael DiPietro, Project Manager Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 50 Wolf Road Albany, New York 12233-7010

with copies to:

- (1) Director, Bureau of Environmental
 Exposure Investigation
 New York State Department of Health
 2 University Place
 Albany, New York 12203
- (2) Daniel J. Palm, Ph.D., Regional Director Region 7 Headquarters New York State Department of Environmental Conservation 615 Erie Boulevard West Syracuse, New York 13204-2400
- (3) Ronald Heerkens, Regional Toxics
 Coordinator
 New York State Department of Health
 217 South Salina Street
 Syracuse, New York 13202-3592
- (4) Rosalie K. Rusinko, Esq.
 Eastern Field Unit
 Division of Environmental Enforcement
 New York State Department of
 Environmental Conservation
 200 White Plains Road, 5th Floor
 Tarrytown, N.Y. 10591

- B. Copies of work plans and reports shall be submitted as follows:
 - (1) Four copies (one unbound) to Michael DiPietro, Project Manager, Division of Hazardous Waste Remediation.
 - (2) Two copies to the Director, Bureau of Environmental Exposure Investigation.
 - (3) One copy to , Regional Director, Region 7.
 - (4) One copy to Rosalie K. Rusinko, Field Unit Case Attorney.
- C. Within 30 days after its approval of the drawings and submittals described in subparagraph II. D of this Order, Respondent shall submit one microfilm copy (16 millimeter roll film M type cartridge) of such Department-approved drawings and submittals, as well as all other Department-approved submittals. Such submissions shall be made to Michael DiPietro.
- D. Communication to be made from the Department to Respondent shall be sent to:
 - (1) Daniel A. Barthold
 Director, Environmental and Energy
 Miller Brewing Company
 3939 West Highland Boulevard
 Milwaukee, Wisconsin 53208
 - (2) Barry R. Kogut, Esq.
 Bond, Schoeneck and King, LLP
 One Lincoln Center
 Syracuse, N.Y. 13202
- E. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XII. Miscellaneous

- A. All activities and submittals required by this Order shall address both on-Site and off-Site contamination resulting from the disposal of hazardous wastes at the Site.
- B. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators acceptable to the Department to perform the technical, engineering, and analytical obligations required by

this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondent shall be submitted to the Department 10 days prior to their performance of any work required under this Order or within 10 days after the effective date of this Order. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondent and such firms or individuals will be responsible unless otherwise provided by the Department. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent.

- C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent. The Department also shall have the right to take its own samples and the Respondent shall have the right to obtain split samples or duplicate samples of all substances and materials sampled by the Department. Respondent and the Department shall make available to each other the results of all sampling and/or tests or other data generated by Respondent or the Department with respect to implementation of this Order. Respondent shall submit these results in accordance with paragraph III of this Order and the Department shall submit its results to Respondent.
- D. Respondent shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.
- Respondent shall use its best efforts to (1)obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondent's obligations under this Order. Respondent shall promptly notify the Department in the event of Respondent's inability to obtain such authorizations on a timely basis. In the event Respondent is unable to obtain the necessary authorizations required to perform its obligations under this Order, the Department may, consistent with its legal authority, assist in obtaining all such authorizations Respondent was unable to obtain despite its best efforts, or which Respondent could not obtain without unreasonable terms or conditions. Respondent shall reimburse the Department, in accordance with the procedures in paragraph VII, for all costs incurred by the Department in obtaining access, including, but not limited to, attorneys fees; however, these costs will not subject to the limitation set forth in subparagraph VII.D. If Respondent cannot obtain such authorizations on a timely basis, the time for performance of any obligation dependent upon such authorization shall be appropriately extended and the Order appropriately modified.

- (2) Notwithstanding anything in this subparagraph XII.E to the contrary, Respondent shall not be required to obtain State or local permits for certain work conducted under this Order consistent with the criteria set forth in 6 NYCRR 375-1.7 and the Department's "Division Technical and Administrative Guidance Memorandum: Permitting Jurisdiction Over Inactive Hazardous Waste Site Remediation O & D Memo 94-04 [Supersedes TAGM 4040]," dated March 21, 1994. Under the foregoing authority, the Respondent shall be required to meet the substantive requirements for air and wastewater discharge permits; however, the Respondent shall not be required to obtain such permits in connection with the Remedial Program to be undertaken in accordance with the terms and conditions of this Order.
- F. The terms of this Order shall be deemed to bind the signatories hereto and their respective successors and assigns. Nothing herein shall be constituted to bind any other entity. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order. Respondent's officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on behalf of Respondent.
- G. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondent with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondent or Respondent's contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for ensuring that Respondent's contractors and subcontractors perform the work in satisfaction of the requirements of this Order.
- H. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.
- I. All references to "days" in this Order are to calendar days unless otherwise specified.

- J. The section headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.
- K. (1) No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.
- (2) If Respondent desires that any provision of this Order be changed, Respondent shall make timely written application, signed by Respondent, to the Commissioner, setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to Rosalie K. Rusinko, Esq. and to Michael DiPietro, P.E.. The Department shall not arbitrarily withhold consent to the requested change and shall promptly respond to the request. Notwithstanding the foregoing, change orders in the field can be approved by the Department's project manager.
- L. The effective date of this Order shall be the date it is signed by the Commissioner or his designee.

DATED: /2/// , New York ,1995

Michael D. Zagata Commissioner New York State Department of Environmental Conservation

By:

20

CONSENT BY RESPONDENT

MILLER BREWING COMPANY

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

On this 27th day of Monthal 1975, before me personally came Grantit W. Rock, to me known, who being duly sworn, did depose and say that he resides in that he is the Anacht Manual Compact of Millet Dewing Compact the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and that he signed his name thereto by like order. Manual Medium Notary Public	provided by law, and agrees to be bound by this Order.	
Date:	By: Sanct Weich	
STATE OF WISCONSIN S.S.: COUNTY OF MILWAUKEE S.S.: On this 27 day of Monaphat 1975, before me personally came Grant with the me known, who being duly sworn, did depose and say that he resides in that he is the American American Common the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and that he signed his name thereto by like order. March Admide Notary Public March		_
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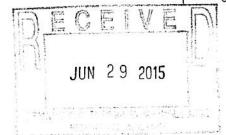
GILBERTI STINZIANO HEINTZ & SMITH, P.C.

555 East Genesee Street Syracuse, New York 13202 T (315) 442-0100 F (315) 442-0106

Not for service of process www.gilbertilaw.com

ATTORNEYS AND COUNSELORS AT LAW

June 29, 2015



Margaret Sheen, Esq. NYS DEC Region 7 615 Erie Blvd. West Syracuse, NY 13204

> Re: Former Miller Container Site No. 738029 Volney (T), Oswego County Declaration of Covenants and Restrictions

Dear Ms. Sheen,

Enclosed is a copy of the Declaration of Covenants and Restrictions which was executed on June 23, 2015 and recorded in the Oswego County Clerk's Office on June 26, 2015.

Although we will not be a signatory to the finalized Site Management Plan ("SMP"), our comments on the draft SMP were solicited and submitted as an attachment to our letter dated May 13, 2015. We would be most appreciative of the Department's response to our comments.

Thank you again for your consideration of these matters.

Very truly yours,

GILBERTI STINZIANO HEINTZ & SMITH, P.C.

William J. Gilberti, Jr.

WJG/smm

Enc.

cc: Riccelli Fulton, LLC

DECLARATION of COVENANTS and RESTRICTIONS 2015 JN 26 A 11: 10

WHEREAS, the Former Miller Container Site (Registry Site # 7-38-029) is the subject of a Remedial Program Order on Consent with Miller Brewing Company ("Miller") (Index # A7-0322-9411)) (effective December 11, 1995) (the "Remedial Order") as part of the New York State Department of Environmental Conservation's (the "Department's) State Superfund Program, namely that parcel of real property located at the address of 1902 County Route 57, Town of Volney, County of Oswego, State of New York, being part of that property conveyed to Riccelli by Crysteel Manufacturing, Inc. by deed dated September 4, 2007 and recorded in the Oswego County Clerk's Office on September 10, 2007 as Instrument # R-2007-011843, and being more particularly described in Schedule "A," attached to this Declaration and made a part hereof, and hereinafter referred to as the "Property;" and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property (the "Remedy") and the Remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, Riccelli, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration is as shown on a map attached to this Declaration as Schedule "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as the "Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, which are described in the SMP, unless in each instance, the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency.

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than for commercial or industrial purposes without the express written waiver of such prohibition by the Department or Relevant Agency.

Fifth, the use of groundwater underlying the Property is prohibited without necessary water quality treatment, as determined by the NYSDOH or the Oswego County Department of Health, to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department or Relevant Agency.

Sixth, the owner of the Property shall, in coordination with Miller and in accordance with the SMP, provide to the Department a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, the owner of the Property shall, in coordination with Miller and in accordance with the SMP, continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency.

Eighth, this Declaration is, and shall be deemed, a covenant that shall run with the land and be binding upon all future owners of the Property. The owner and its successors and assigns hereby consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions set forth in this Declaration and covenant not to contest the authority of the Department or Relevant Agency to seek enforcement.

Ninth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

RICCELLI FULTON, LLC J. Riccelli ate: 6/23/2016 Grantor's Acknowledgment STATE OF NEW YORK) s.s.: COUNTY OF ONON DAGA) On the <u>131</u> day of <u>lune</u>, in the year 201A, before me, the undersigned, personally appeared Richard J- Riccelli, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) of the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

FREDERICK J MICALE
Notary Public, State of New York
No. 02Mi6070642
Qualified in Onondaga County
Commission Expires March 04, 2018

Notary Public State of New York

SCHEDULE "A"

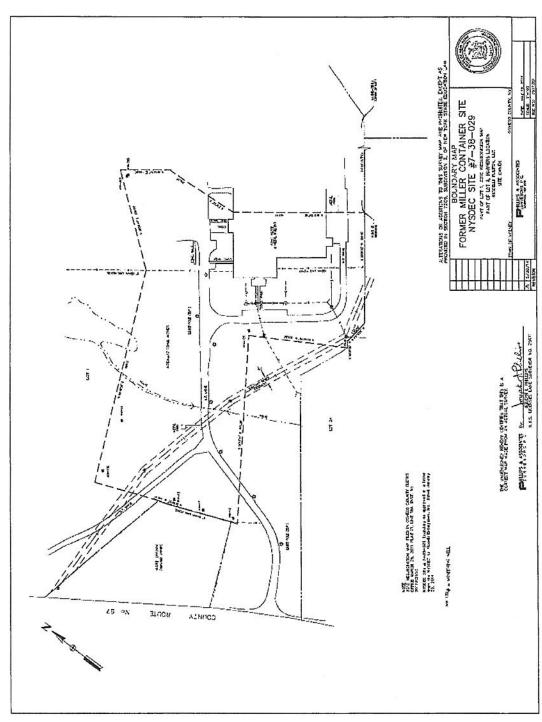
LEGAL DESCRIPTION

FORMER MILLER CONTAINER SITE

NYSDEC SITE #7-38-029

All that tract or parcel of land situate in the Town of Volney, County of Oswego and State of New York, being part of Subdivision 8, Harpers Location in said Town, being part of Lot 1 as shown on the 2010 Resubdivision Map filed in Oswego County Clerk's Office March 25, 2011, Plat 21, Line 184, Inst. No. R2011002653, and being more particularly described as follows:

Beginning at a point in the southeasterly boundary of said Lot 1, said point being S 53° 09' 00" W, measured along said southeasterly boundary, a distance of 741.60 feet from the southeasterly corner of said Lot 1; running thence S 53° 09' 00" W along said southeasterly boundary, a distance of 354.40 feet to an angle point; thence N 83° 19' 00" W, continuing along said boundary, a distance of 80.80 feet to an angle point; thence S 52° 29' 00" W, continuing along said boundary, a distance of 20.30 feet to an angle point; thence N 29° 43' 09" W, a distance of 321.58 feet to a point; thence S 56° 47' 51" W, a distance of 603.39 feet to a point in range with the southerly prolongation of the division line between said Lot 1 on the east and lands now or formerly of Mark Drumm (reputed owner) on the west; thence N 20° 59' 07" W along said southerly prolongation and said division line and its northerly prolongation, a distance of 473.41 feet to a point; thence N 66° 48' 58" E, a distance of 698.12 feet to a point; thence N 38° 56' 44" E, a distance of 329.89 feet to a point; thence S 36° 50' 57" E, a distance of 160.00 feet to a point; thence S 3° 31' 32" E, a distance of 240.37 feet to a point; thence S 36° 51' 00" E, a distance of 423.44 feet to the point of beginning, containing 12.704 acres, more or less.



SCHEDULE "B"

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LEGAL DESCRIPTION

FORMER MILLER CONTAINER SITE

NYSDEC SITE #7-38-029

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Earth Tech, Inc. Gary Mullen P. O. Box 117 Fulton, NY 13069

James A. Moras NYSDEC Department of Environmental Conservation Bureau of Western Remedial Action 625 Broadway 11th floor Albany, NY 12233

Re UST Closure Former Miller Brewing Company Fulton, NY NYSDEC Site # 7-38-029

Dear Mr. Moras,

In general accordance with the work plan submitted to NYSDEC in July 2001, and approved in a letter dated April 24, 2002, the converted underground storage tank sump system at the above referenced site was decommissioned and the tanks closed-in-place on June 27-28, 2002. Earth Tech on behalf of Miller provided technical oversight of the closure. Precision Industrial Maintenance, Inc., Schenectady, NY, provided the UST closure services.

Prior to closure the manways to the tanks were uncovered and opened. The sump pumps were removed from the tanks and relocated to the groundwater treatment facility where they were cleaned and placed in storage. All piping, electrical controls, circuit panels, and other pertinent systems were removed.

Based on the recommendation of the closure services provider, Earth Tech authorized a minor variation in the work plan. A #1A pea stone was used in place of the specified sand as fill for the tanks. The pea stone would allow for a better and more even distribution of the fill item. It also provided a more porous material to accept the sealing slurry. A total of 58 cubic yards of stone was placed directly into the tanks with a conveyor truck worth 15 yards placed in UST-1, 21 yards into UST-2, and 22 yards into UST-3. Each tank was filled up to approximately the base of the manway (approximately 60" below grade).

After the fill was placed in the tanks, a thin mixture of Portland cement mixed with sand and bentonite powder was poured slowly into each of the tanks until no more would be accepted. The material was poured slowly to allow the mixture to seep into the pore spaces in the stone and to settle out. The placement process continued until the surface of the flowable fill at approximately six inches below grade and no more material would be accepted.

Mr. Moras

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July 22, 2002

The sealing material was allowed to cure after placement until July 12, 2002 (approximately two weeks). On July 12, 2002, all pipes associated with the recovery system were filled back to the tanks with a non-shrink grout and the floor finished with a 5,000 PSI concrete.

As stated in the approved work plan, due to the available analytical samples for soils and groundwater collected during the remedial investigation and subsequent remedial actions, no additional post closure sampling was planned or performed. Miller respectfully requests that NYSDEC update it's records and note that these tanks have been closed-in-place.

If you have any questions regarding this issue please feel free to call me at (315) 598-5396

Sincerely,

Earth Tech

Gary W. Mullen, Jr. Operations Manager

CC: Quinton Hancock, Miller Brewing
Daniel Barthold, Miller Brewing
Henriette Hamel, NYSDOH
Andrew English, NYSDEC
G. Harris, NYSDEC
Dave Crosby, NYSDEC
J. May / R Parker, NYSDEC
C. Whitfield, NYSDEC
Mike Kelly, Earth Tech
Kevin McGrath, Earth Tech
Terry Chesney, Crysteel Mgf.