



Division of Environmental Remediation

**Environmental Restoration
Record of Decision
Market Basket Site
City of Geneva, Ontario County
Site Number B-00018-8**

March 2002

**DECLARATION STATEMENT
ENVIRONMENTAL RESTORATION RECORD OF DECISION**

**Market Basket Environmental Restoration Site
City of Geneva, Ontario County, New York
Site No. B-00018-8**

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Market Basket environmental restoration site which was chosen in accordance with the New York State Environmental Conservation Law.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Market Basket environmental restoration site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous substances and petroleum products from this site, if not addressed by implementing the remedy selected in this ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based on the results of the Site Investigation/Remedial Alternatives Report (SI/RAR) for the Market Basket site, and the criteria identified for evaluation of alternatives, NYSDEC has selected Excavation and Off-Site Disposal of Contaminated Soils. The components of the remedy are as follows:

- C Building demolition, including asbestos abatement, to access potentially contaminated areas beneath the floor slabs;
- Additional investigation to accurately delineate areas of contamination beneath the footprint of the buildings. These areas can not be efficiently or safely investigated prior to removal of the dilapidated buildings;
- Excavation and off-site disposal of contaminated soil in the vicinity of a former tank pit (apparent gasoline spill) and the former boiler room (apparent fuel oil spill) and any contamination found beneath the footprint of the buildings;

- An operation and maintenance program, including groundwater monitoring, to monitor natural attenuation of any residual compounds that may remain at the site; and
- Deed restrictions to prohibit the use of groundwater as a potable or process water source without treatment to achieve New York State standards; and ensure that if site soil is excavated, it is managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. The deed restrictions will also require owners to annually certify to NYSDEC that the restrictions have been adhered to and that the conditions at the site are fully protective of public health and the environment in accordance with the Record of Decision.

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.

Date

Michael J. O'Toole, Jr., Director
Division of Environmental Remediation

TABLE OF CONTENTS

SECTION	PAGE
1: Summary of the Record of Decision	2
2: Site Location and Description	3
3: Site History	3
3.1 Operational/Disposal History	3
3.2 Environmental Restoration History	4
4: Site Contamination	4
4.1 Summary of Site Investigation	4
4.2 Interim Remedial Measures	8
4.3 Summary of Human Exposure Pathways	9
4.4 Summary of Environmental Exposure Pathways	9
5: Enforcement Status	10
6: Summary of the Remediation Goals and the Proposed Use of the Site	10
7: Summary of the Evaluation of Alternatives	10
7.1 Description of Remedial Alternatives	11
7.2 Evaluation of Remedial Alternatives	13
8: Summary of the Selected Remedy	16
9: Highlights of Community Participation	17
Tables	
Table 1: Nature and Extent of Contamination	
Table 2: Groundwater Elevation Data	
Table 3: Remedial Alternative Costs	
Table 4: Summary of Detected Compounds in Soil Samples	
Table 5: Summary of Detected Compounds in Groundwater Samples	

Figures	Figure 1:	Site Location Map
	Figure 2:	Site Plan
	Figure 3:	Contaminants of Concern in Soil
	Figure 4:	Contaminants of Concern in Groundwater
	Figure 5:	Groundwater Contours - 09/05/01
Appendices	Appendix A:	Responsiveness Summary
	Appendix B:	Administrative Record

Environmental Restoration RECORD OF DECISION

**Market Basket Site
City of Geneva, Ontario County
Site No. B-00018-8
March 2002**

SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health has selected this remedy to address the threat to human health and/or the environment created by the presence of hazardous substances at the Market Basket brownfield site.

The 1996 Clean Water/Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Under the Environmental Restoration (Brownfields) Program, the State may provide a grant to the City of Geneva to reimburse up to 75 percent of the eligible costs for remediation activities. Once remediated, the property can then be reused.

The site is situated in an industrial area of the City of Geneva, at the intersection of Gates Avenue and Lehigh Street. As more fully described in Sections 3 and 4 of this document, former operations at the site, including industrial manufacturing and auto body repair, have resulted in the disposal of hazardous substances at the site. These substances include volatile organic compounds (petroleum and solvent-related), semivolatile organic compounds (petroleum-related), and inorganic compounds (metals). These disposal activities have resulted in the following threats to the public health and/or the environment:

- C A threat to human health associated with potential exposure to contaminated soils by trespassers or to contaminated soils and groundwater by workers during future construction activities at or near the site.
- C An environmental threat associated with the impacts of contaminants to subsurface soils and groundwater.

In order to eliminate or mitigate the threats to the public health and/or the environment that the hazardous substances disposed at the Market Basket brownfield site have caused, the following remedy was selected to allow for commercial/industrial use of the site:

- C Building demolition, including asbestos abatement, to access potentially contaminated areas beneath the floor slab;

- Additional investigation to accurately delineate areas of contamination beneath the footprint of the building. These areas can not be efficiently or safely investigated prior to removal of the dilapidated buildings;
- Excavation and off-site disposal of contaminated soil in the vicinity of a former tank pit (apparent gasoline spill) and the former boiler room (apparent fuel oil spill) and any contamination found beneath the footprint of the buildings; and
- An operation and maintenance program, including groundwater monitoring, to monitor natural attenuation of any residual compounds that may remain at the site.
- Deed restrictions to prohibit the use of groundwater as a potable or process water source without treatment to achieve New York State standards; and ensure that if site soil is excavated, it is managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. The deed restrictions will also require owners to annually certify to NYSDEC that the restrictions have been adhered to and that the conditions at the site are fully protective of public health and the environment in accordance with the Record of Decision.

The selected remedy, discussed in detail in Section 8 of this document, is intended to attain the remediation goals selected for this site in Section 6 of this Record of Decision (ROD) in conformity with applicable standards, criteria, and guidance (SCGs).

SECTION 2: SITE LOCATION AND DESCRIPTION

The Market Basket brownfield site (B-00018-8) is located in an industrial area of the City of Geneva, Ontario County, at the intersection of Gates Avenue and Lehigh Street. The site is situated north of the main downtown area of the City of Geneva, approximately 0.75 mile northwest of Seneca Lake (see Figure 1). The site is accessible from State Route 14, which is a major connector between the New York State Thruway (located about five miles north of the site) and US Route 20 (located about one mile south of the site).

This 2.6 acre property consists of two parcels, each containing one building. The parcels are located on the north and south sides of Gates Avenue and bounded by Lehigh Street to the west. The building on the southern parcel is abutted to the south by an adjoining building (see Figure 2). The buildings on the Market Basket property are currently in poor condition and generally unsafe to occupy.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

Because there have been no reported releases at the site and a definitive source area has not been identified, the exact events resulting in waste disposal at the site are not known. The known chronology of operations at the site, however, is as follows:

1900 - 1931 The Geneva Cutlery Company occupied the southern Market Basket parcel;

1925 - 1956 Market Basket Corp. occupied the site as a grocery warehouse;

1956 - 1975 Vacant or general warehouse space;

1975 - 1986 Tool rentals and paint booth rental for do-it-yourself auto body repair; and

1986 - Present Vacant.

3.2: Environmental Restoration History

In September 1997, NYSDEC approved the City of Geneva's application for a Brownfield Investigation grant under the 1996 Clean Water/Clean Air Bond Act. A State Assistance Contract (SAC) was issued effective March 11, 1999. The work plan for the investigation was submitted to NYSDEC in August 1998.

Only minimal environmental restoration activities have been reported at the site prior to this brownfield investigation. In February 1997, the City of Geneva Engineering Department inspected the site and noted approximately twenty 55-gallon drums and dozens of five-gallon containers of unknown origin or contents in the buildings and on the site grounds. Some of the containers were reportedly in poor condition with evidence of leakage. The City of Geneva subsequently had the drums and containers removed for proper off-site disposal. The buildings were also found to have significantly damaged and friable asbestos-containing pipe insulation.

Additionally, in 1987, the Geneva Fire Department noted that "the building was in a deplorable condition and a very definite fire hazard ... the structural integrity of portions of the building pose a genuine threat to the lives of firefighters; with holes in the floors and collapsing ceilings and roof supports."

SECTION 4: SITE CONTAMINATION

To determine the nature and extent of any contamination by hazardous substances of this environmental restoration site, the City of Geneva has recently completed a Site Investigation/Remedial Alternatives Report (SI/RAR).

4.1: Summary of the Site Investigation

The purpose of the Site Investigation (SI) was to define the nature and extent of any contamination resulting from previous activities at the site. The SI was conducted between October 1998 and October 2000. A report entitled, Site Investigation Report and Remedial Alternatives Report for Brownfields Investigation, Market Basket Property, Geneva, New York, October 2000, has been prepared which describes the field activities and findings of the SI in detail. The SI included the following activities:

- Passive soil gas investigation to screen the site for organic vapors in the soil and identify specific areas for further investigation;
- Installation of soil borings and monitoring wells for analysis of soils and groundwater as well as physical properties of soil and hydrogeologic conditions;
- Excavation of a test trench to investigate pipes noted adjacent to the former boiler room;
- Sampling and analysis of oily sludge material identified in the test trench noted above; and
- Excavation and removal of three underground storage tanks and associated soil sampling.

To determine which media (soil, groundwater, etc.) are contaminated at levels of concern, the SI analytical data was compared to environmental standards, criteria, and guidance values (SCGs). Groundwater and drinking water SCGs identified for the Market Basket site are based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part 5 of New York State Sanitary Code. For soils, NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 provides soil cleanup guidelines for the protection of groundwater, background conditions and health-based exposure scenarios. In addition, for soils, background concentration levels can be considered for certain categories of contaminants.

Based on the Site Investigation results in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized below. More complete information can be found in the SI Report.

Chemical concentrations are reported in parts per billion (ppb) or parts per million (ppm). For comparison purposes, where applicable, SCGs are provided for each medium.

4.1.1: Site Geology and Hydrogeology

Soils identified at the site during this investigation consist primarily of fine-grained sands with varying amounts of silt and clay. Soil borings at the site were advanced to 15 feet below grade. Bedrock (Onondaga Limestone according to Geologic Map of New York) was not encountered.

Groundwater was generally encountered within five to ten feet below the ground surface and generally flows in an easterly direction beneath the site (see Figure 5). There is public water serving the area; therefore, groundwater is not being utilized for drinking water purposes.

4.1.2: Nature of Contamination

As described in the SI report, many soil and groundwater samples were collected at the site to characterize the nature and extent of contamination. The contaminants of concern identified at this site include the following:

- Volatile organic compounds (VOCs) related to chlorinated solvents (e.g., trichloroethene, 1,2-dichloroethene, and vinyl chloride) and petroleum products (e.g., benzene, ethylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and xylenes);
- Semivolatile organic compounds (SVOCs) likely related to petroleum products including benzo(a)anthracene, benzo(a)pyrene, and chrysene; and
- Inorganic (metal) compounds apparently related to an oily sludge material at the site, including beryllium, chromium, copper, iron, mercury, nickel, and zinc.

4.1.3: Extent of Contamination

Table 1 summarizes the extent of contamination for the contaminants of concern in soils and groundwater and compares the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Soil

A total of 23 soil samples were obtained from various locations of concern around the exterior portions of the site. Due to the dilapidated condition of the buildings and associated safety concerns, sampling of soils beneath the structures was not completed.

Soil samples collected during the investigation included one from each of 15 soil borings completed on, or immediately adjacent to, the Market Basket property, two samples of soils excavated during removal of an underground storage tank (UST), five samples from the walls and floor of the excavated tank pit, and a sample of oily sludge material encountered during excavation of an exploratory trench. Sampling locations are shown on Figure 2. Table 1 and Figure 3 show the compounds detected above soil SCGs and Table 4 summarizes all compounds detected in soil samples.

Soil Borings - Of the 17 soil borings completed for this investigation, 15 were completed on, or immediately adjacent to, the Market Basket property (identified as BH-1 through BH-6, BH-9, and BH-11 through BH-18). One soil sample was collected from each of the 15 on-site borings and submitted for laboratory

analysis of VOCs, SVOCs, and metals. Note that the remaining two borings (BH-7 and BH-8) were completed south and southeast of the site for the purpose of installing groundwater monitoring wells; off-site soil sampling was not completed from these borings. No boring identified as BH-10 was completed during this investigation.

The analytical results of soil samples collected from these 15 borings identified the following exceedances of SCGs:

- VOCs - No exceedances of SCGs detected.
- SVOCs - Two exceedances occurred in the sample collected from boring BH-5; benzo(a)anthracene at 300 ppb (vs. SCG of 224 ppb) and benzo(a)pyrene at 260 ppb (vs. SCG of 61 ppb). No other soil boring samples had SCG exceedances for SVOCs.
- Metals - Several naturally occurring metal compounds were detected in soil borings throughout the site. Samples collected from borings BH-5, BH-6, and BH-13, however, had concentrations of the following metal compounds that are significantly elevated in comparison to their respective concentrations at other boring locations at the site: beryllium up to 1.1 ppm (vs. SCG of 0.16 ppm or site background), copper up to 609 ppm (vs. SCG of 25 ppm or site background), iron up to 33,700 ppm (vs. SCG of 2,000 ppm or site background), nickel up to 35.5 ppm (vs. SCG of 13 ppm or site background), and zinc up to 594 ppm (vs. SCG of 20 ppm or site background). Figure 3 includes a table comparing inorganic (metal) compounds at these three borings locations to the TAGM 4046 recommended soil cleanup objectives and the concentration range at other borings at the site. These three borings are all located in the vicinity of an oily sludge material containing similar constituents (see text below under the heading Sludge).

Tank Pit Soils - During removal of an out-of-service gasoline UST (see Section 4.2), soils excavated from the tank pit were temporarily staged on site in two piles (north and south). One soil sample was collected from each pile and submitted for laboratory analysis of petroleum-related VOCs and SVOCs. The sample collected from the north pile of staged soil had SCG exceedances for the VOCs 1,3,5-trimethylbenzene at 7.1 ppm (vs. SCG of 3.3 ppm) and total xylenes at 5.5 ppm (vs. SCG of 1.2 ppm). These soils had been backfilled into the tank pit prior to receipt of laboratory analytical results and are addressed in the evaluation of alternatives presented in Section 7 of this ROD.

Following removal of the tank and surrounding soils, confirmatory soil samples were collected from the north, south, east, and west tank pit walls and the tank pit bottom. The following SCG exceedances for SVOCs were detected in the tank pit west wall sample: benzo(a)anthracene at 440 ppb (vs. SCG of 224 ppb), benzo(a)pyrene at 440 ppb (vs. SCG of 61 ppb), and chrysene at 430 ppb (vs. SCG of 400 ppb). No SCG exceedances were detected in the other tank pit samples.

Sludge - A backhoe was used to excavate an exploratory trench in the vicinity of unidentified pipes located near the former boiler room in the northeast corner of the southern building. Although a connection to the

pipes was not identified, the exploratory trench encountered dark oily sludge material that may have been related to the former use of these pipes (apparent spill(s) of fuel oil).

A sample of the sludge was collected for laboratory analysis of VOCs, SVOCs, PCBs, and metals. Results indicate elevated concentrations (above SCGs) of two SVOCs (benzo(a)anthracene at 1,800 ppb and chrysene at 4,200 ppb) and the following metals: beryllium at 0.63 ppm, chromium at 238 ppm (vs. SCG of 50 ppm or site background), copper at 338 ppm, iron at 26,900 ppm, mercury at 0.31 ppm (vs. SCG of 0.1 ppm), nickel at 54.5 ppm, and zinc at 594 ppm. In addition, several “tentatively identified compounds” (TICs) were reported by the laboratory in this sample that do not correspond to the target compound list of contaminants. SVOC TICs totaled 597 ppm and VOC TICs totaled 12 ppm. As noted previously, SCG exceedances for several of these SVOC and metal compounds were detected in nearby soil samples BH-5, BH-6, and BH-13. This sludge is believed to be the source of this contamination in the nearby soils.

Groundwater

Three rounds of groundwater sampling have been completed at the site. The first round (April 1999) included sampling of each of the eight wells at the site (MW-1 through MW-8). The second round (June 1999) did not include MW-3 due to partial building collapse in this area that destroyed the well head. The third round of samples (September 2001) was completed by NYSDEC personnel and only included wells MW-2, MW-5, MW-6, and MW-7 for confirmation/reassessment of previous sample results.

Table 1 and Figure 4 show the compounds of concern detected above groundwater standards and Table 5 summarizes all compounds detected in groundwater samples. The analytical results of groundwater samples collected at the site identified the following exceedances of SCGs:

- VOCs in MW-2 - Ethylbenzene at 11 ppb (vs. SCG of 5 ppb), 1,2,4-Trimethylbenzene at 11 ppb (vs. SCG of 5 ppb), and total xylenes up to 27 ppb (vs. SCG of 5 ppb)
- VOCs in MW-5 - Trichloroethene at 12 ppb (vs. SCG of 5 ppb)
- VOCs in MW-6 - 1,2-Dichloroethene up to 20.6 ppb (vs. SCG of 5 ppm)
- VOCs in MW-7 - 1,2-Dichloroethene up to 39 ppb, trichloroethene up to 25.2 ppb, and vinyl chloride up to 30 ppb (vs. SCG of 2 ppb)
- Metals - Several metal compounds were detected above SCGs in groundwater samples collected from various wells during the first two rounds. These samples were observed to have high levels of suspended solids. During the third round of sampling, NYSDEC personnel performed low-flow purging and sampling techniques on the two wells that previously had the highest metal detections in groundwater samples (MW-6 and MW-7). This sampling methodology substantially limits the amount of suspended particulates in the samples. The third round groundwater sample results for these two wells had inorganic SCG exceedances for iron, magnesium, manganese, and sodium

only. These detections are believed to be indicative of naturally occurring background levels in the area. Metal exceedances in the previous sampling rounds are attributed to suspended particulates in the samples, which are not representative of groundwater in equilibrium. Metals in groundwater, therefore, are not considered contaminants of concern for this site.

Groundwater Flow - Figure 5 shows groundwater contours for elevation measurements collected from the seven existing monitoring wells at the site on September 5, 2001. Elevation measurements previously collected from these seven wells on June 29, 1999, September 27, 1999, and April 25, 2000 yielded similar groundwater contour patterns. Groundwater elevation measurements are summarized in Table 2. This data indicates that groundwater flow beneath the site is generally in an easterly direction. Note that monitoring well MW-3, which was destroyed by a partial building collapse prior to the initial groundwater elevation measurement on June 29, 1999, is not included in this evaluation.

Passive Soil Gas Survey

Nineteen passive soil gas sampling points were installed at the site, including two sub-slab locations in the southern Market Basket building. The results indicate potential sources of petroleum product and chlorinated solvent contamination under the northeast corner of the southern Market Basket building and in the southeast corner of the courtyard area of the northern building. Further investigation of these areas could not be adequately performed during this investigation with the dilapidated buildings remaining in place.

4.2: Interim Remedial Measures

An Interim Remedial Measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the SI/RAR. Three underground storage tanks were removed from the site as IRMs during this brownfield investigation. All three tanks have been registered with the NYSDEC as closed/removed. The former tank locations, as described below, are shown on Figure 2:

- **8,000-gallon gasoline tank** - This tank was removed from the northeast portion of the site and transported off site for proper disposal. Analytical results of soil sampling associated with this tank pit are discussed in Section 4.1.2 under the heading Tank Pit Soils.
- **500-gallon water-filled tank** - This tank was removed from near the southeast corner of the southern building and transported off site for proper disposal. No evidence of contamination (visual, olfactory, or field screening instruments) was identified during removal. As such, no samples were collected from the tank pit. Additionally, nearby soil and groundwater samples (BH/MW-5, BH/MW-6, and BH 14) did not contain compounds that would likely be attributed to this tank.

- **290-gallon fuel oil tank** - This tank was removed from the north side of the southern building and transported off site for proper disposal. No contamination was identified in surrounding soil and groundwater samples (BH/MW-3, BH-16, BH-17, and BH-18).

4.3: Summary of Human Exposure Pathways

This section describes the types of human exposures that may present added health risks to persons at or around the site.

An exposure pathway is the manner by which an individual may come in contact with a contaminant. The five elements of an exposure pathway are 1) the source of contamination; 2) the environmental media and transport mechanisms; 3) the point of exposure; 4) the route of exposure; and 5) the receptor population. These elements of an exposure pathway may be based on past, present, or future events.

Pathways which are known to or may exist at the site include:

- Ingestion of on-site soils;
- Direct contact with on-site soils;
- Inhalation of dust from the site;
- Potential direct contact with groundwater; and
- Potential inhalation of VOCs from contaminated soil and groundwater.

Public water serves the area; therefore, ingestion of contaminated groundwater is unlikely. It is expected that this property will be developed for commercial/industrial use; therefore, remediation and/or institutional controls (e.g., deed restrictions) will be required to mitigate the known and potential future exposure pathways.

4.4: Summary of Environmental Exposure Pathways

This section summarizes the types of environmental exposures and ecological risks which may be presented by the site. There are no significant environmental resources (i.e., creeks/streams, wetlands, habitats, etc.) located at or adjacent to the Market Basket site. Groundwater flow is generally in an easterly direction. The relatively low-level contaminant concentrations detected in some of the downgradient wells at the site do not indicate concerns with off-site migration through groundwater to environmental receptors. No pathways for environmental exposure or ecological risks have been identified. However, these contaminants have adversely impacted the groundwater resource at the site.

SECTION 5: ENFORCEMENT STATUS

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

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the State to recover State response costs should PRPs be identified. The City of Geneva will assist the State in its efforts by providing all information to the State which identifies PRPs. The City of Geneva will also not enter into any agreement regarding response costs without the approval of the NYSDEC.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND THE PROPOSED USE OF THE SITE

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. The overall remedial goal is to meet all standards, criteria, and guidance (SCGs) and be protective of human health and the environment. At a minimum, the remedy selected must eliminate or mitigate all significant threats to the public health and to the environment presented by the hazardous substances disposed at the site through the proper application of scientific and engineering principles.

The proposed future use for the Market Basket site would be commercial/industrial. The goals selected for this site are:

- # Reduce, control, or eliminate to the extent practicable the contamination present within the soils/waste on site.
- # Eliminate to the extent practicable the potential for direct human contact with the contaminated soils or groundwater on site.
- # Provide for attainment of SCGs for groundwater quality at the site, to the extent practicable.

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy must be protective of human health and the environment, be cost effective and comply with other statutory requirements. Potential remedial alternatives for the Market Basket site were identified, screened and evaluated in a Remedial Alternatives Report. This evaluation is presented in the report entitled Site Investigation Report and Remedial Alternatives Report for Brownfields Investigation, Market Basket Property, Geneva, New York, October 2000.

A summary of the analysis, as modified by NYSDEC, follows. As presented below, the time to implement reflects only the time required to implement the remedy, and does not include the time required to design the remedy or procure contracts for design and construction.

7.1: Description of Remedial Alternatives

The potential remedies are intended to address the contaminated soils and groundwater at the site. All of the remedies, with the exception of the no further action alternative, provide for demolition of the dilapidated buildings followed by sub-slab soil characterization. The cost of the building demolition is estimated to be \$550,000 and the soil characterization is estimated to cost \$50,000. Because the total quantity of contaminated soils at the site cannot be determined until these preliminary steps are complete, the potential remedies all assume a baseline figure of 1,000 cubic yards of contaminated soil. In addition, it is assumed that the contaminated soil will not require handling/disposal as hazardous waste based on existing analytical data.

Alternative 1: No Further Action

This alternative recognizes remediation of the site conducted under previously completed IRMs. It is evaluated as a procedural requirement and as a basis for comparison. Only continued monitoring is necessary to evaluate the effectiveness of the remediation completed under the IRM. A five-year groundwater monitoring program is assumed.

This alternative would leave the site in its present condition and would not provide any additional protection to human health or the environment.

Present Worth:	\$43,500
Capital Cost:	\$0
Annual O&M:	\$10,000
Time to Implement:	Not applicable

Alternative 2: Soil Cover

This alternative involves building demolition, further soil characterization, and covering the entire 2.6-acre site with a minimum 12 inches of top soil. This would prevent direct contact with contaminated soils and decrease contaminant transport to groundwater by promoting storm water runoff and evapotranspiration (plant uptake and evaporation). Because the contamination would be left in place, there is no cleanup goal for this alternative. Deed restrictions would be required to ensure that the remedy remains in place and continues to be effective. A five-year groundwater monitoring program would follow the completion of the remedy to monitor groundwater conditions.

Present Worth:	\$843,500
Capital Cost:	\$800,000
Annual O&M:	\$10,000
Time to Implement:	6 - 12 months

Alternative 3: Excavation and Off-Site Disposal

This alternative involves building demolition, further soil characterization, and removal and off-site disposal of contaminated soils. The baseline figure of 1,000 cubic yards of contaminated soils, as discussed above, and an assumed soil density of 1.5 tons per cubic yard are used. Excavations would then be backfilled with clean fill material. The cleanup objectives for this alternative are specified in TAGM 4046.

Due to the sporadic occurrence of metal contamination over a fairly wide area, it may not be feasible to achieve soil cleanup objectives in all areas; some subsurface metal contamination (above TAGM levels) may remain particularly in the southeastern portion of the site. However, all source material such as the oily sludge would be removed and institutional controls (e.g., deed restrictions) would be implemented.

A five-year groundwater monitoring plan would follow the completion of the remedy to confirm its effectiveness.

Present Worth: \$768,500
Capital Cost: \$725,000
Annual O&M: \$10,000
Time to Implement: 6 - 12 months

Alternative 4: Biocell Treatment

This alternative involves building demolition, further soil characterization, and in-situ treatment of contaminated soils using bioremediation technology. The selected technology involves the excavation of contaminated soils and mixing with bacteria that use organic compounds as a food source; specific bacteria would also be added to address metals, if applicable. The inoculated soils would be placed back into lined excavation(s) to create biocell(s). The baseline figure of 1,000 cubic yards of contaminated soils is assumed as discussed above. The cleanup objectives for this alternative are specified in TAGM 4046.

Due to the sporadic occurrence of metal contamination over a fairly wide area, it may not be feasible to achieve soil cleanup objectives in all areas; some subsurface metal contamination (above TAGM levels) may remain particularly in the southeastern portion of the site. However, all source material such as the oily sludge would be treated and institutional controls (e.g., deed restrictions) would be implemented.

A five-year groundwater and biocell monitoring plan, including specific bioremediation parameters, would follow the completion of the remedy to confirm its effectiveness.

Present Worth: \$787,000
Capital Cost: \$700,000
Annual O&M: \$20,000
Time to Implement: 6 - 12 months

7.2 Evaluation of Remedial Alternatives

The criteria used to compare the potential remedial alternatives are defined in the regulation that directs the remediation of environmental restoration project sites in New York State (6 NYCRR Part 375). For each of the criteria, a brief description is provided followed by an evaluation of the alternatives against that criterion.

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

1. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance. The most significant SCGs identified for this site are 6NYCRR Part 703 Water Quality Regulations, NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1., and NYSDEC TAGM 4046. The documents identify groundwater standards and guidelines and soil cleanup objectives which are protective of human health and the environment.

- Alternative 1 would leave contaminated soils in place and would not meet this criterion.
- Alternative 2 would meet this criterion in regard to the new cover soil material, which would prevent contact to the contaminated soils below.
- Alternatives 3 and 4 would generally meet this criterion by removing or treating the contamination. Some metal contamination may remain in subsurface soils in the southeastern portion of the site but deed restrictions would be utilized to prevent future exposure to this material.
- All four alternatives rely on natural attenuation to achieve groundwater standards. The relatively low levels of contamination in groundwater are expected to meet groundwater standards in the long term due to attenuation.

2. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

- Alternative 1 would not meet this criterion.
- Alternative 2 would reduce potential human exposure and environmental exposure by placing a permanent soil cover over the contamination, which would also decrease contaminant transport to groundwater.
- Alternative 3 would reduce potential human and environmental exposure by removing contaminated soil.

- Alternative 4 would reduce potential human and environmental exposure by treating contaminated soil.

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/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

- Alternative 1 would meet this criterion as there would not be any short term adverse impacts.
- Alternatives 2, 3, and 4 - The handling of contaminated soils may present potential short-term exposures to on-site workers and others in the vicinity of the work activities. Mitigative measures such as temporary fence installation, dust suppression controls during excavations, and implementation of a site-specific health and safety plan would be utilized to address short-term effects.
- Of these three, Alternative 2 would involve the least disturbance of contaminated soils.

4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. 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.

- Alternative 1 would not meet this criterion.
- Alternative 2 would effectively prevent contact to contaminated soils; however, it would allow all identified wastes to remain on site after the remedy has been implemented. The effectiveness of this alternative in meeting this criterion would be dependant upon the adequacy and reliability of institutional controls intended to limit the risks to human exposure.
- Alternatives 3 and 4 would meet this criterion by permanently removing or treating most contaminated soil. Some pockets of metal contamination may remain in subsurface soils in the southeastern portion of the site. Managing risks associated with exposure to this material (through institutional controls), however, would be substantially less cumbersome to the municipality than that associated with Alternative 2.

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

- Alternative 1 would not meet this criterion.
- Alternative 2 would reduce the mobility of the contamination in soils by limiting storm water infiltration and leaching to groundwater. This alternative would not provide any significant reduction in the toxicity or volume of the contaminated soil.
- Alternative 3 would meet this criterion by removing the majority of contaminated soil at the site in a short period of time.
- Alternative 4 would meet this criterion by permanently treating the majority of contaminated soil. However, this alternative would take more time to achieve this criterion due to inherent time requirements associated with bioremediation technology.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.

- All of the remedial alternatives are technically feasible and can be implemented at the site.
- Administratively, the feasibility of Alternative 4 may be hindered by the municipality's and community's desire to develop the site in a timely manner. The biocells could be constructed in a relatively short period of time, but ongoing monitoring of the biocells would be necessary until SCGs have been met. This could complicate, delay, or prevent redevelopment.

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 presented in Table 3.

- Alternative 1 (\$43,500) is least expensive.
- Building demolition, including asbestos abatement, is estimated to cost \$550,000 and is a component of the remaining three alternatives.
- The total present worth of the remaining three alternatives range from \$768,500 (excavation/off-site disposal) to \$843,500 (soil cover). The cost for biocell treatment falls in between at an estimated total present worth of \$787,000.

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

8. Community Acceptance - Concerns of the community regarding the SI/RAR reports and the Proposed Remedial Action Plan are evaluated. The "Responsiveness Summary," included as Appendix A, presents the public comments received and the Department's responses to the concerns raised. In general, the public comments received were supportive of the selected remedy.

SECTION 8: SUMMARY OF THE SELECTED REMEDY

Based on the results of the SI/RAR, and the evaluation presented in Section 7, NYSDEC is selecting Alternative 3 (excavation and off-site disposal) as the remedy for this site. This selection is based upon the evaluation of the alternatives developed for this site.

Alternative 1 does not comply with the threshold criteria and, therefore, is eliminated from further consideration. The remaining three alternatives are similar with respect to the majority of the balancing criteria. The only major differences between these alternatives are related to the toxicity and volume of contaminants, administrative feasibility, and cost. Although Alternative 2 (soil cover) would be protective of human health and the environment, it would not provide any significant reduction in the toxicity or volume of the contaminated soil. Alternative 2 would also require institutional controls that would be substantially more burdensome to the municipality than those associated with Alternatives 3 or 4. The ultimate duration for Alternative 4 (biocell treatment) to meet soil SCGs is uncertain and dependent upon a number of biological factors. Furthermore, this alternative would require the implementation of a pilot test in order to collect additional data necessary to properly design a full scale biocell treatment system for the site. Alternative 3 will provide for the removal of the source materials from the ground, allowing a visual and analytical inspection to ensure that soils containing contaminants of concern in excess of the proposed remedial objectives will be removed and transported off-site. Additionally, the estimated cost of Alternative 3 is less than that of Alternatives 2 or 4.

The estimated present worth cost to implement the remedy is \$768,500. The cost to construct the remedy is estimated to be \$725,000 and the estimated average annual operation and maintenance cost for five years is \$10,000.

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. Any uncertainties identified during the SI/RAR will be resolved;
2. Building demolition;
3. Sub-slab soil characterization;
4. Excavation and off-site disposal of contaminated soils to levels consistent with TAGM 4046. A baseline figure of 1,000 cubic yards is assumed due to uncertainties prior to completing the sub-

slab soil evaluation. This figure also assumes that all soils demonstrating elevated metal concentrations in the southeast area of the site will not be removed. Rather, the source sludge material in this area will be removed and some pockets of metal contamination in soils may remain. Excavations will be backfilled with clean fill material;

5. Since the selected remedy will not immediately meet groundwater standards, a monitoring program will be instituted for a minimum of five years. This program will allow the effectiveness of the selected remedy to be monitored and will be a component of the operation and maintenance for the site. The monitoring program will be evaluated after five years to determine whether further monitoring is necessary; and
6. Deed restrictions will be used to prohibit the use of groundwater as a potable or process water source without treatment to achieve New York State standards; and ensure that if site soil is excavated, it is managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. The deed restrictions will also require owners to annually certify to NYSDEC that the restrictions have been adhered to and that the conditions at the site are fully protective of public health and the environment in accordance with the Record of Decision.

SECTION 9: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the Market Basket environmental restoration process, a number of Citizen Participation activities were undertaken in an effort to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- # Document repositories were established and maintained for public review of project-related documents.
- # A site mailing list was established which included nearby property owners, local political officials, local media and other interested parties. The list has been periodically updated.
- # A Citizen Participation Plan was established in 1998.
- # A Fact Sheet was mailed to announce the beginning of field work at the site. A second Fact Sheet was mailed announcing the public meeting and availability of the PRAP for public review.
- # A public comment period was held from February 11, 2002 through March 27, 2002 to receive input on the PRAP from the public and any other interested parties.
- # A public meeting was held on March 5, 2002 to summarize findings of the site investigation and present the PRAP. Questions regarding the site and the proposed plan were addressed.
- # In March 2002, a Responsiveness Summary was prepared and made available to the public, to address the comments received during the public comment period for the PRAP.

**Table 1
Nature and Extent of Contamination**

MEDIUM	CATEGORY	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppb - organics) (ppm - inorganics)	FREQUENCY of Exceeding SCGs or Background	SCG/ Bkgd. (ppb/ ppm)
Soil	Volatile Organic Compounds (VOCs)- ppb	1,3,5-Trimethylbenzene	ND to 7,100	1 of 23	3,300
		Xylenes	ND to 5,500	1 of 23	1,200
	Semi-Volatile Organic Compounds (SVOCs)- ppb	Benzo(a)anthracene	ND to 1,800	3 of 23	224
		Benzo(a)pyrene	ND to 440	2 of 23	61
		Chrysene	ND to 4,200	2 of 23	400
	Inorganic Compounds (Metals) - ppm	Beryllium	0.05 to 1.1	3 of 16	0.40 (B)
		Chromium	3.4 to 238	1 of 16	50
		Copper	4.0 to 609	4 of 16	25
		Iron	7,470 to 33,700	4 of 16	17,000 (B)
		Mercury	ND - 0.31	1 of 16	0.1
		Nickel	5.4 to 35.5	4 of 16	15.5 (B)
Zinc		17.6 to 594	4 of 16	50 (B)	
Groundwater	Volatile Organic Compounds (VOCs)- ppb	1,2-Dichloroethene (total)	ND to 39	3 of 19	5
		Ethylbenzene	ND to 11	1 of 19	5
		Trichloroethene	ND to 25.2	3 of 19	5
		1,2,4-Trimethylbenzene	ND to 11	1 of 19	5
		Vinyl Chloride	ND to 30	1 of 19	2
		Xylenes (total)	ND to 27	2 of 19	5

Notes: (B) denotes a site-specific background value based on evaluation of soil boring data.

SCG = Standards, Criteria, or Guidance

ND = Not Detected

ppb = parts per billion

ppm = parts per million

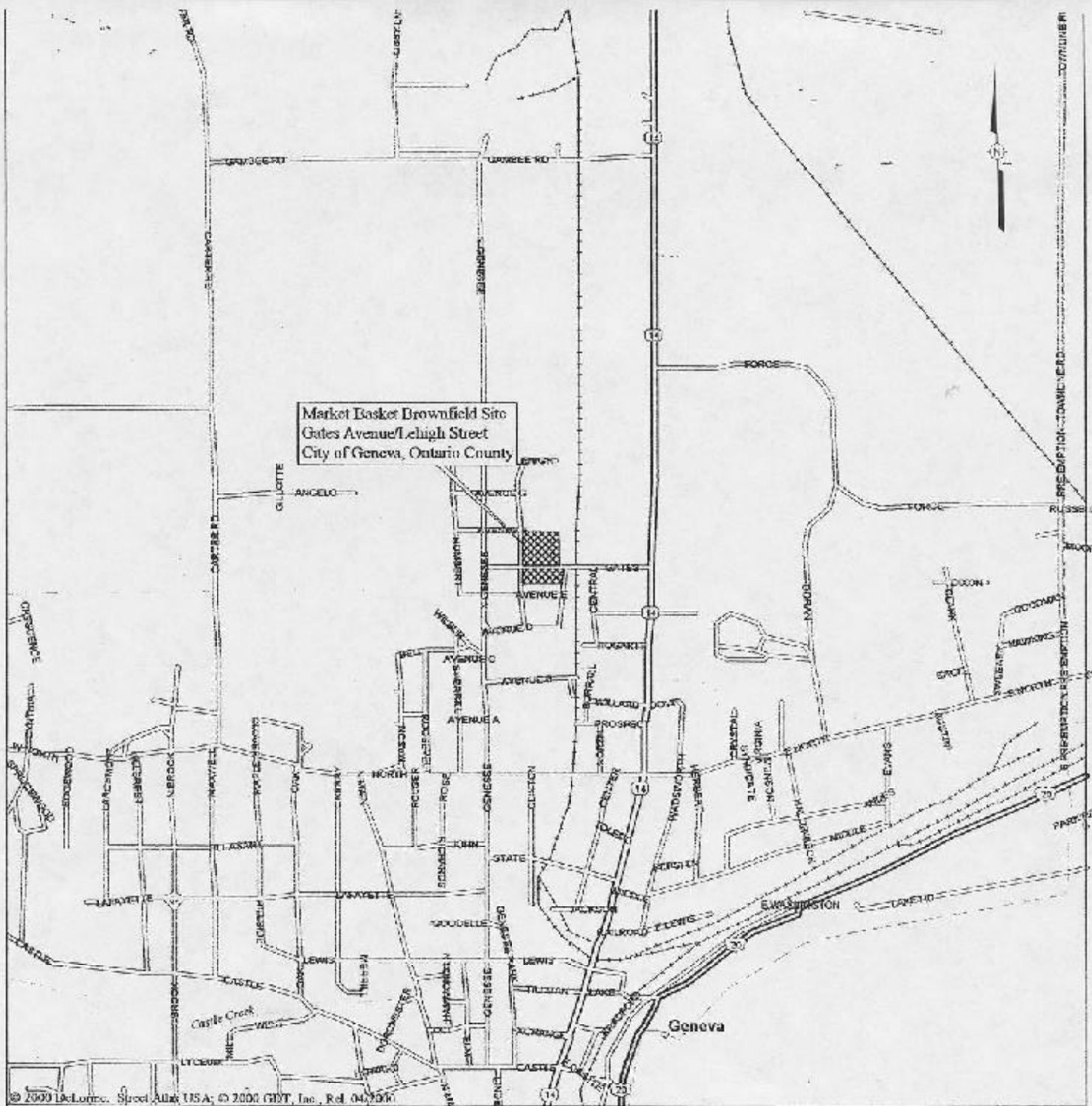
Table 2
Groundwater Elevation Data

<u>Date</u>	<u>MW-1</u>	<u>MW-2</u>	<u>MW-3</u>	<u>MW-4</u>	<u>MW-5</u>	<u>MW-6</u>	<u>MW-7</u>	<u>MW-8</u>
6/29/99	458.31	455.53	DESTROYED	451.33	453.39	453.19	454.01	456.55
9/27/99	457.26	454.33		450.90	452.99	452.74	453.64	455.93
4/25/00	463.47	457.17		452.78	453.66	454.87	455.57	458.32
9/05/01	457.24	454.18		450.50	452.72	452.24	453.17	455.56

Note: All elevation data are provided in feet above mean sea level

Table 3
Remedial Alternative Costs

Remedial Alternative	Capital Cost	Annual O&M	Total Present Worth
Alt. 1 - No Further Action w/ Monitoring	\$0	\$10,000	\$43,500
Alt. 2 - Soil Cover	\$800,000	\$10,000	\$843,500
Alt. 3 - Soil Excavation/Disposal	\$725,000	\$10,000	\$768,500
Alt. 4 - Biocell Treatment	\$700,000	\$20,000	\$787,000



Mag 15.00

Fri Dec 21 14:51 2001

Scale 1:15,625 (at center)

1000 Feet

500 Meters

- | | | | |
|---|-------------|---|-------------------|
|  | Local Road |  | City |
|  | State Route |  | County Boundary |
|  | Trail |  | Population Center |
|  | US Highway |  | Water |
|  | Railroad |  | Woodland |

FIGURE 1 - SITE LOCATION MAP

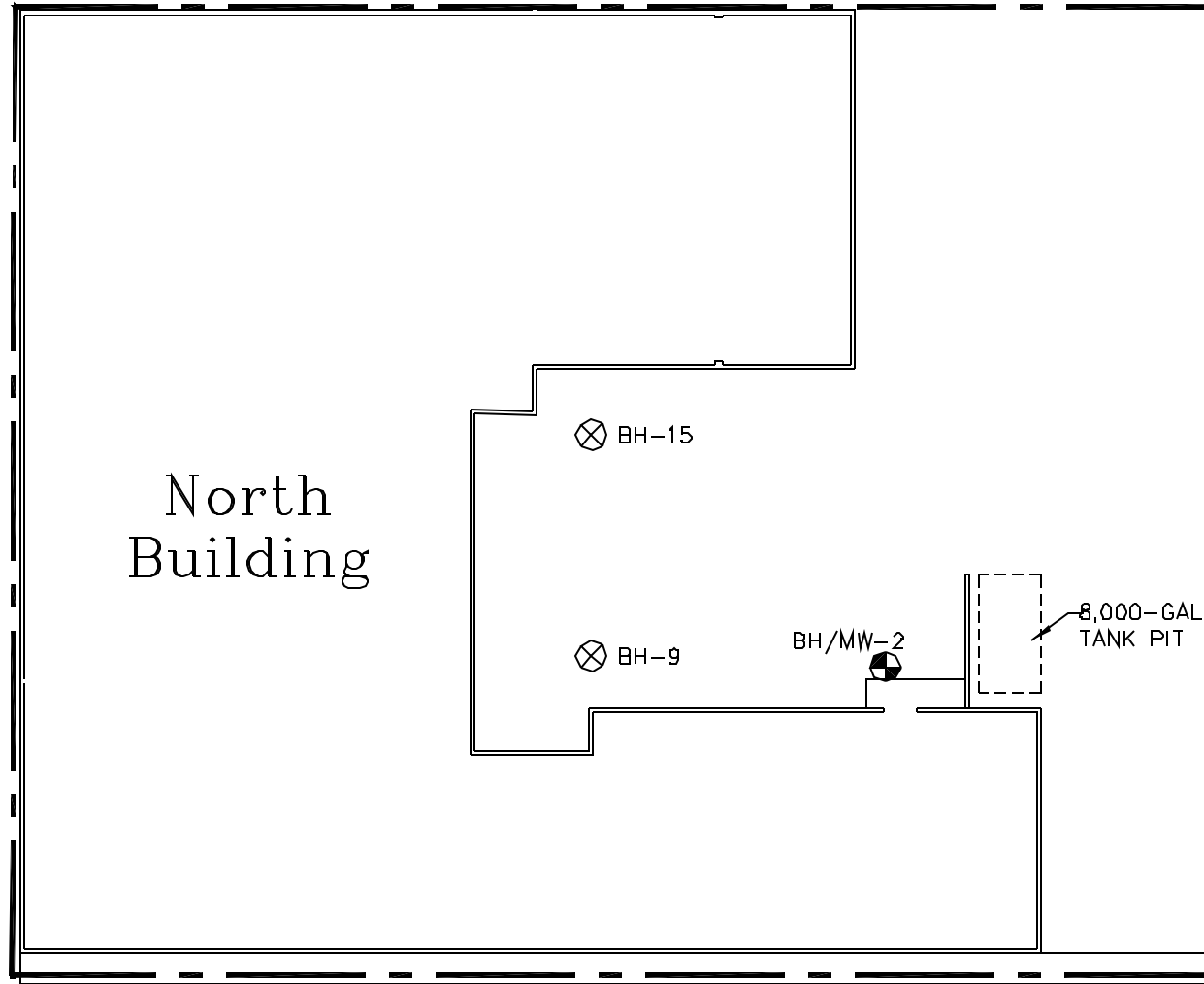
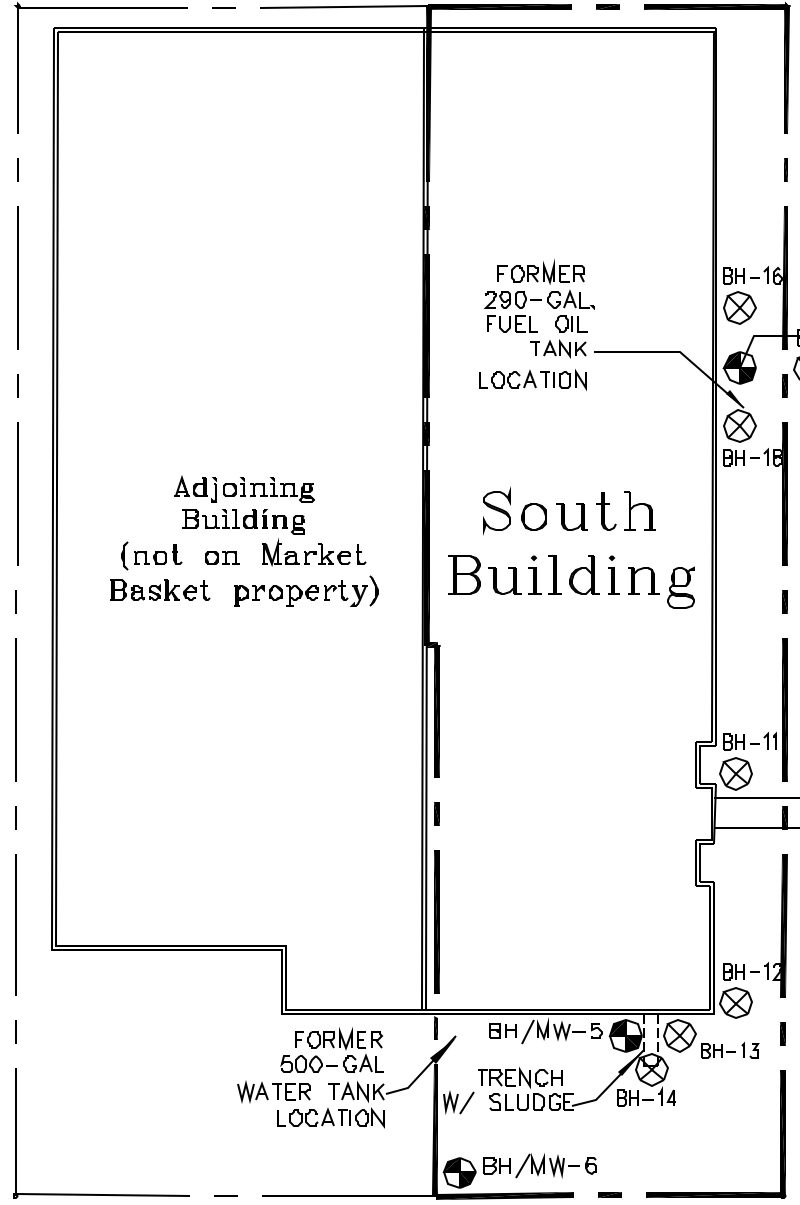


LEHIGH STREET

AVENUE E

GATES AVE.

AVENUE F



BH/MW-8

BH/MW-1

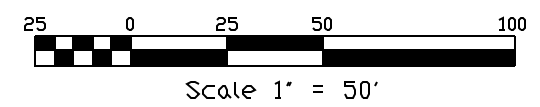
BH/MW-4

FORMER RAILROAD RIGHT-OF-WAY

H.B. FULLER COMPANY

EXPLANATION

- LOCATIONS:
-  BH/MW BORE HOLE WITH MONITORING WELL
 -  BH BORE HOLE



MARKET BASKET BROWNFIELD SITE	
CITY OF GENEVA, ONTARIO COUNTY, NEW YORK	
SITE NO. B-00018-B	
ENVIRONMENTAL RESTORATION RECORD OF DECISION	
FIGURE 2 - SITE PLAN	
SCALE: 1" = 50'	DATE: 3/20/02
PREPARED BY: DIVISION OF ENVIRONMENTAL REMEDIATION NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION <small>* Base Map Prepared by Passero Associates, P.C.</small>	

Comparison of Inorganic Contaminants of Concern

Compound	BH-5	BH-6	BH-13	RSCO	Conc. Range at Other Boreholes
Beryllium (Be)	1.1	0.51	0.39	0.16 or SB	0.05 - 0.40
Copper (Cu)	29.5	609	34.7	25 or SB	4.0 - 13.1
Iron (Fe)	30,900	24,200	33,700	2,000 or SB	7,470 - 16,900
Nickel (Ni)	27.3	35.5	22.0	13 or SB	5.4 - 15.5
Zinc (Zn)	68.8	352	594	20 or SB	17.6 - 43.8

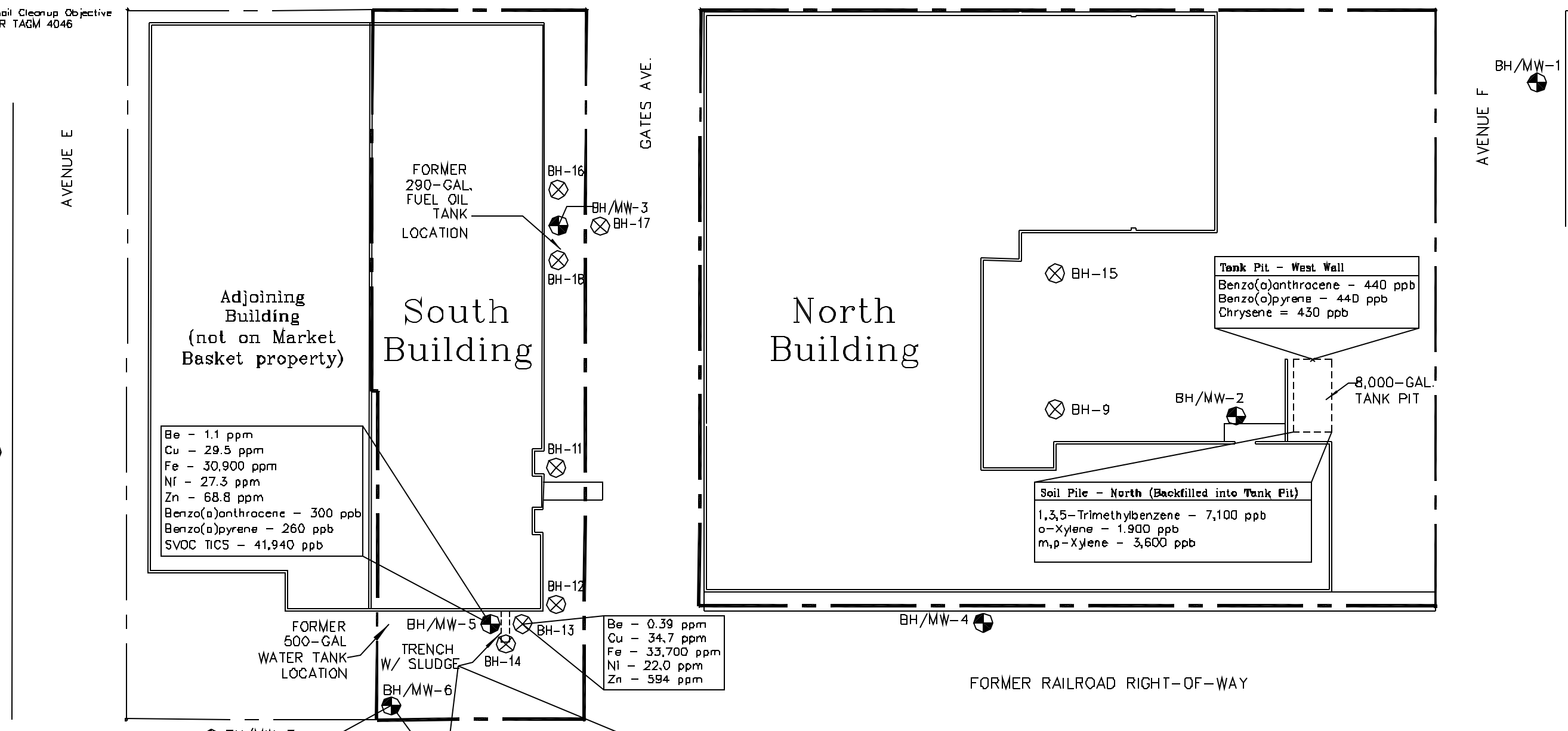
Notes: All values are in units of parts per million (ppm)

RSCO = Recommended Soil Cleanup Objective presented in DER TAGM 4046

SB = Site Background



LEHIGH STREET



Be - 1.1 ppm
 Cu - 29.5 ppm
 Fe - 30,900 ppm
 Ni - 27.3 ppm
 Zn - 68.8 ppm
 Benzo(a)anthracene - 300 ppb
 Benzo(a)pyrene - 260 ppb
 SVOC TICs - 41,940 ppb

Be - 0.39 ppm
 Cu - 34.7 ppm
 Fe - 33,700 ppm
 Ni - 22.0 ppm
 Zn - 594 ppm

Be - 0.51 ppm
 Cu - 609 ppm
 Fe - 24,200 ppm
 Ni - 35.5 ppm
 Zn - 352 ppm

Beryllium (Be) - 0.63 ppm
 Chromium (Cr) - 238 ppm
 Copper (Cu) - 338 ppm
 Iron (Fe) - 26,900 ppm
 Mercury (Hg) - 0.31 ppm
 Nickel (Ni) - 54.5 ppm
 Zinc (Zn) - 594 ppm
 Benzo(a)anthracene - 1,800 ppb
 Chrysene - 4,200 ppb
 SVOC TICs* (total) - 597,000 ppb
 VOC TICs* (total) - 12,000 ppb

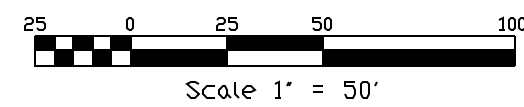
* TICs = Tentatively Identified Compounds

Tank Pit - West Wall
 Benzo(a)anthracene - 440 ppb
 Benzo(a)pyrene - 440 ppb
 Chrysene - 430 ppb

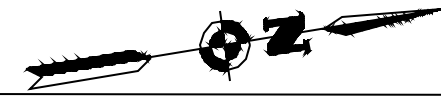
Soil Pile - North (Backfilled into Tank Pit)
 1,3,5-Trimethylbenzene - 7,100 ppb
 o-Xylene - 1,900 ppb
 m,p-Xylene - 3,600 ppb

EXPLANATION

- LOCATIONS: BH/MW BORE HOLE WITH MONITORING WELL
 BH BORE HOLE



MARKET BASKET BROWNFIELD SITE
 CITY OF GENEVA, ONTARIO COUNTY, NEW YORK
 SITE NO. B-00018-B
ENVIRONMENTAL RESTORATION
RECORD OF DECISION
 FIGURE 3 - CONTAMINANTS OF CONCERN IN SOIL
 SCALE: 1" = 50' DATE: 3/20/02
 PREPARED BY:
 DIVISION OF ENVIRONMENTAL REMEDIATION
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 * Base Map Prepared by Passero Associates, P.C.

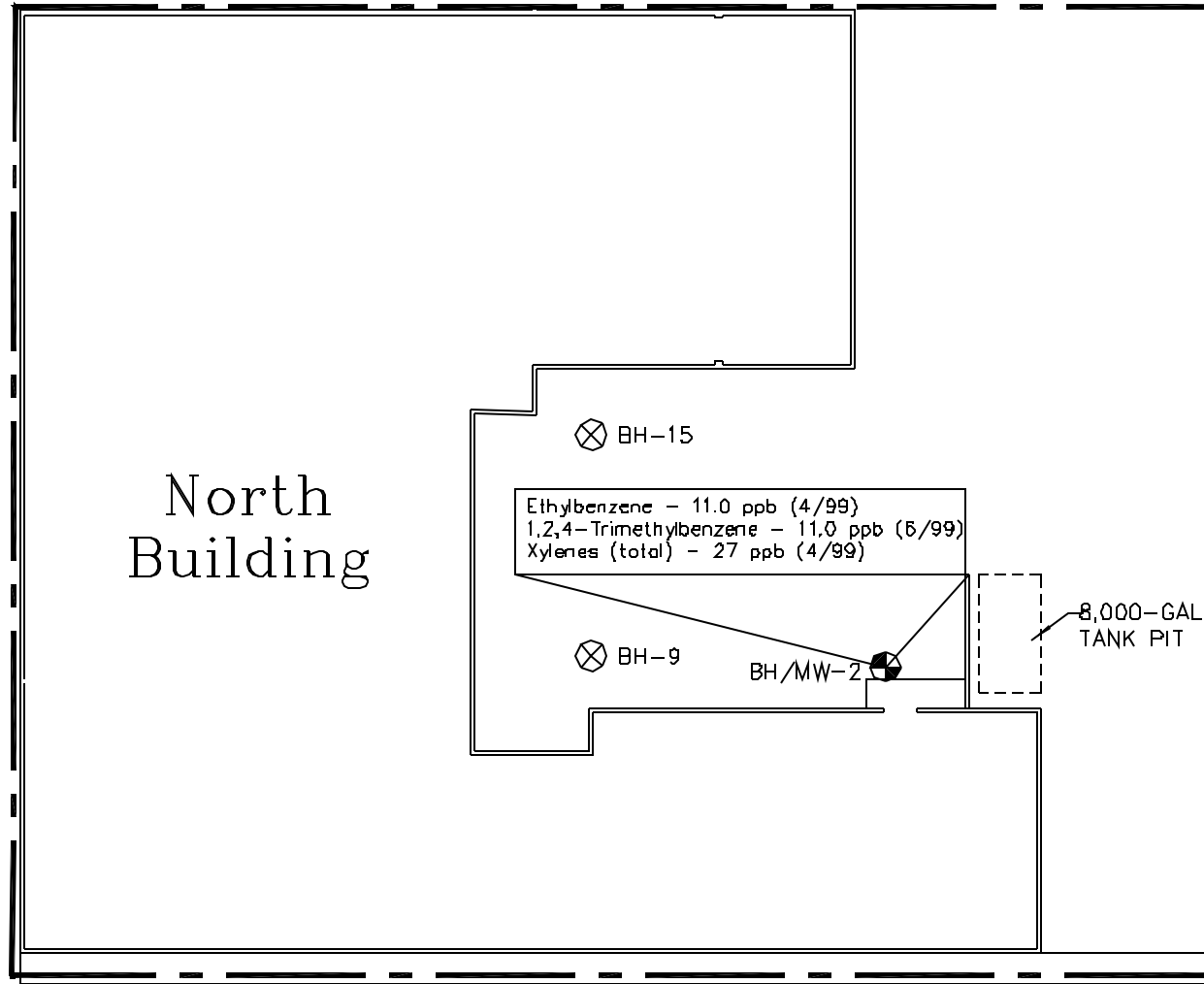
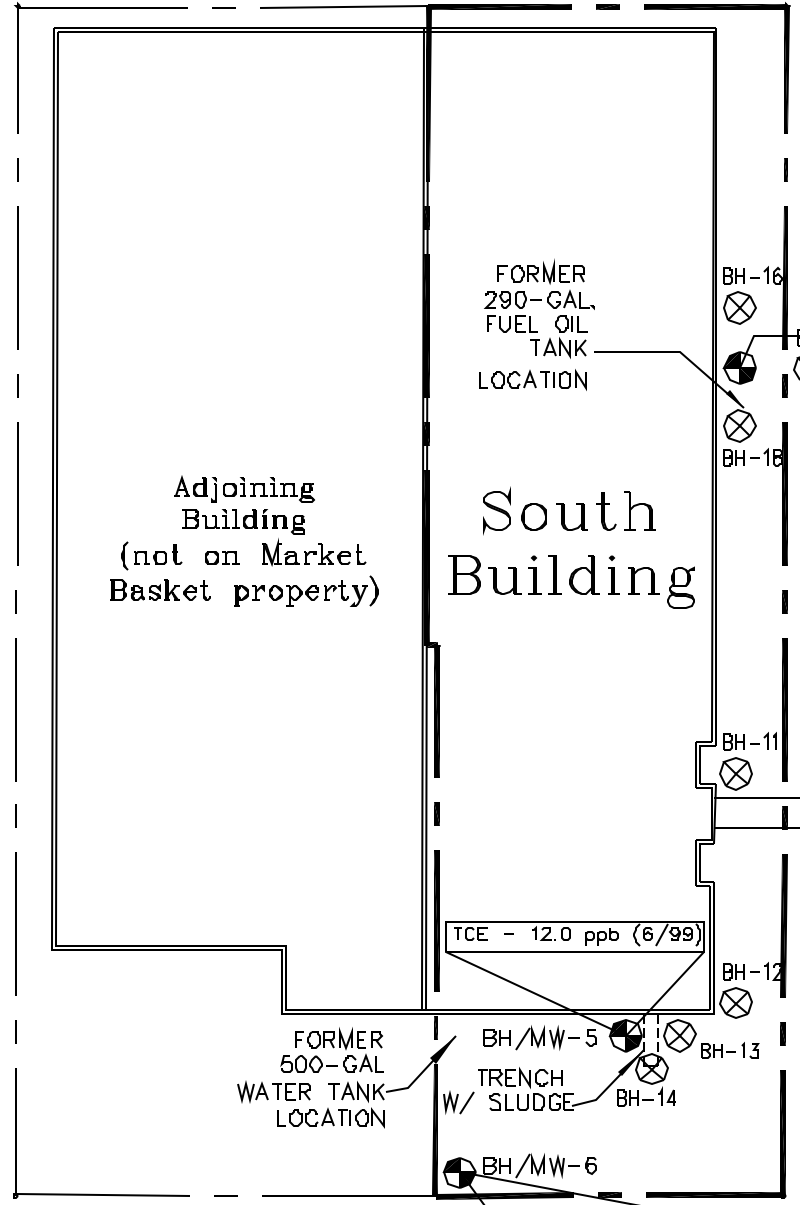


LEHIGH STREET

AVENUE E

GATES AVE.

AVENUE F



BH/MW-8

BH/MW-1

FORMER 290-GAL. FUEL OIL TANK LOCATION

Adjoining Building (not on Market Basket property)

South Building

North Building

TCE - 12.0 ppb (6/99)

Ethylbenzene - 11.0 ppb (4/99)
1,2,4-Trimethylbenzene - 11.0 ppb (6/99)
Xylenes (total) - 27 ppb (4/99)

8,000-GAL. TANK PIT

FORMER 500-GAL. WATER TANK LOCATION

TRENCH W/ SLUDGE

FORMER RAILROAD RIGHT-OF-WAY

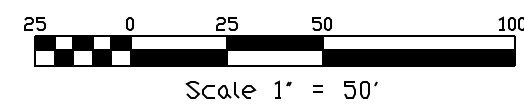
H.B. FULLER COMPANY

1,2-DCE - 39.0 ppb (9/01)
TCE - 25.2 ppb (9/01)
VC - 30 ppb (6/99)

1,2-DCE - 20.6 ppb (9/01)

EXPLANATION

- LOCATIONS:
- BH/MW BORE HOLE WITH MONITORING WELL
 - BH BORE HOLE



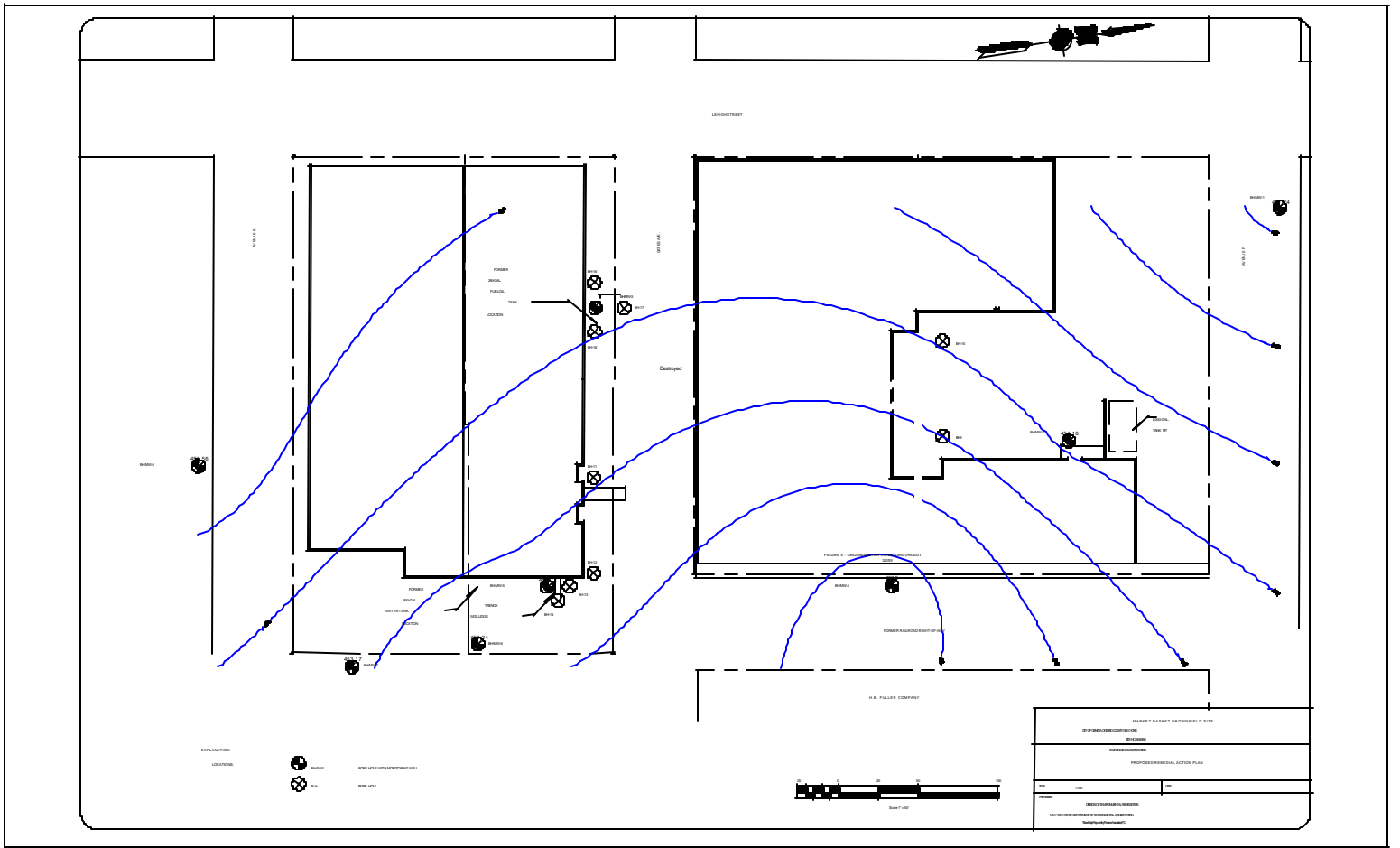
MARKET BASKET BROWNFIELD SITE
CITY OF GENEVA, ONTARIO COUNTY, NEW YORK
SITE NO. B-00018-B

**ENVIRONMENTAL RESTORATION
RECORD OF DECISION**

FIGURE 4 - CONTAMINANTS OF CONCERN IN GROUNDWATER

SCALE: 1" = 50' DATE: 3/20/02

PREPARED BY:
DIVISION OF ENVIRONMENTAL REMEDIATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
* Base Map Prepared by Passero Associates, P.C.



EXPLANATION

LOCATIONS

 WATER
 S.W.
 NEW 1000 GPM CAPACITY WELLS
 NEW 1000



H.K. KELLER COMPANY	
H.K. KELLER COMPANY	
PROPOSED REMEDIATION ACTION PLAN	
DATE	BY
REVIEWED BY: [Signature] TITLE: [Title] DATE: [Date]	

APPENDIX A

RESPONSIVENESS SUMMARY

**Market Basket
Environmental Restoration Proposed Remedial Action Plan
City of Geneva, Ontario County
Site No. B-00018-8**

The Proposed Remedial Action Plan (PRAP) for the Market Basket brownfield site, was prepared by the New York State Department of Environmental Conservation (NYSDEC) and issued to the local document repository on February 11, 2002. This Plan outlined the preferred remedial measure proposed for the remediation of the contaminated soil and groundwater at the Market Basket brownfield site. The preferred remedy is building demolition, followed by excavation and off-site disposal of contaminated soils.

The release of the PRAP was announced via a notice to the mailing list, informing the public of the PRAP's availability.

A public meeting was held on March 5, 2002 which included a presentation of the Site Investigation as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. Written comments were received from O'Brien & Gere Engineers, Inc. on behalf of the City of Geneva. The public comment period for the PRAP ended on March 27, 2002.

This Responsiveness Summary responds to all questions raised at the March 5, 2002 public meeting and to the written comments received.

The following are the questions and comments received at the public meeting, with the NYSDEC's responses:

Question 1: On the summary of contaminants, what does ND mean?

Response 1: The "ND" designation means that the associated contaminant was not detected at a concentration above the laboratory detection limit. These detection limits are generally very low and below the NYSDEC standards, criteria, or guidance values (SCGs) for the associated compound. Detailed laboratory data for this project, including information on the detection limits, is available upon request.

Question 2: **On the contaminant summary, could you tell me in plain English, do the figures indicate this is a slightly, moderately or very contaminated area?**

Response 2: For the most part, the groundwater contaminants detected at the site are present at levels only marginally above SCGs and the extent of soil contamination is limited. Based on the results of the site investigation, including the exposure assessment, this site could be considered slightly contaminated in comparison to what has been found at many other industrial sites.

Question 3: **What are chlorinated compounds?**

Response 3: This term refers to group of volatile organic compounds (VOCs) containing various combinations of chlorine, carbon, and usually hydrogen molecules. The industrial solvent, trichloroethene (C₂HCl₃), is a common example.

Question 4: **Was there any groundwater contamination found in the other monitoring wells besides the well in the southeast sector? Do you know how far south and how far east the plume of contamination goes?**

Response 4: The three wells in the southeastern portion of the site (MW-5, MW-6, and MW-7) contain levels of chlorinated solvent compounds marginally above groundwater standards. Additionally, petroleum-related compounds were detected at levels marginally above groundwater standards in monitoring well MW-2 located in the northeastern portion of the site, near the former gasoline tank pit. Samples collected from the remaining four wells (MW-1, MW-4, MW-3, and MW-8) showed no evidence of groundwater contamination.

The lack of contamination in groundwater from monitoring well MW-8, located south of the site, indicates that the contaminated groundwater plume does not extend this far south. Based on the relatively low-level concentrations in the downgradient wells (MW-5, MW-6, and MW-7), it does not appear that the plume would be migrating significantly beyond these locations.

Question 5: **Were any contaminants found in the North Building?**

Response 5: Due to safety concerns, no sampling was done beneath the footprint of the north building. Following demolition, a sub-slab soil characterization will be completed and any contaminated areas will be designated for excavation and off-site disposal.

Question 6: **Were any contaminants found under the Fuller Company?**

Response 6: No sampling was done on the adjacent H.B. Fuller Company property under this investigation. The results of an independent investigation completed at the Fuller site, identifying chlorinated solvent compounds in groundwater, have been submitted to NYSDEC. All available data indicate that there is no correlation between the contaminated groundwater at the Market Basket and Fuller sites; particularly as groundwater generally flows from the Market Basket site toward the Fuller site and groundwater at the Market Basket site has lower concentrations of chlorinated solvents. A voluntary agreement between NYSDEC and the owner of the Fuller site was recently signed to address this separate issue.

Question 7: Is there anything significant or dangerous on the site now?

Response 7: The most significant danger at the site at this time appears to be the structural instability of the dilapidated buildings. While the contaminated subsurface soils and groundwater could potentially be dangerous to those unaware of the contamination, there is currently no exposure to this subsurface contamination. A project-specific Health and Safety Plan (HASP) will be followed during implementation of the remedy to protect workers and the public from any potential dangers at the site during intrusive operations.

Question 8: How soon can the Market Basket site be demolished? Do you have a demolition start date?

Response 8: The City of Geneva may elect to demolish the buildings once design plans and specifications have been finalized and the contract has been awarded. There is no firm start date at this time. The State will reimburse the City for up to 50% of the eligible demolition costs once a brownfield remediation grant and associated state assistance contract (SAC) have been issued. This process can take several months. It may be possible for the City to move forward with the demolition before the SAC is issued; however, reimbursement cannot be provided until these steps are complete.

Question 9: It took some time to get to this point and I'm wondering if the State or Federal government can withdraw the funding designated for the demolition at this time? Will this project go forward? The neighbors would like to see this site demolished and out of here! We've seen other projects like this one stop. Is there any assurance this project will continue?

Response 9: This is a State brownfield project in which the Federal government has no direct involvement. The costs for building demolition are eligible under the State Environmental Restoration Program (Brownfields Program), but not reimbursable until the remediation application and SAC are approved. Once obligated, the funds for the demolition project will not be retracted by the State as long as the cleanup is

completed and the contractual elements of the brownfield program are adhered to. The \$200 million Environmental Restoration Program (Brownfields Program) contains ample funding for this project.

Question 10: Is the large chimney at the site next door coming down during the demolitions?

Response 10: There are no plans for demolition of any adjacent structures as part of this project.

Question 11: If you do any excavations on the site, will any hazardous waste found have to be disposed of properly?

Response 11: All contaminated soils excavated from the site will be properly disposed of at a permitted facility. As discussed in Section 7.1 of the ROD, it is assumed that contaminated soils at the site will not require handling or disposal as hazardous waste based on existing analytical data. In the event hazardous waste is identified, however, it will be required to be handled and disposed of in accordance with applicable regulations.

Question 12: Are there any active treatments being used? Are any enzymes or natural uses being applied to the groundwater and soil contamination?

Response 12: There are no active treatment systems, enzymes, or other natural treatments currently being used at the site. The selected remedy is for the excavation and off-site disposal of contaminated soils followed by groundwater monitoring. It is not anticipated that any form of additional treatment would be needed following completion of the remedy.

Question 13: What is the five year groundwater monitoring? If someone purchases the site in the next two years, who is responsible for the groundwater monitoring for the remaining 3 years?

Response 13: It is anticipated that the removal of contaminated soils will allow groundwater quality to improve over time. Following completion of the remedy, groundwater monitoring will be performed for a minimum of five years for confirmation of the remedy's effectiveness; after which time there will be an evaluation to determine whether additional monitoring is necessary. Responsibility for implementing the groundwater monitoring program may or may not follow ownership of the property, depending on the specifics of any purchase agreement(s). In any event, the City of Geneva is ultimately responsible for the groundwater monitoring.

Question 14: What does deed restrictions mean?

Response 14: When contamination may remain at a site at levels in excess of SCGs, the State typically requires that legal restrictions be placed on the property deed in order to prevent future site uses or activities that may pose a risk to public health or the environment. Deed restrictions for this site will prohibit the use of groundwater (unless treated to meet State standards) and require a soil management plan (SMP) to address procedures to be followed during the excavation of potentially contaminated soils. The SMP would ensure that the excavation of soils and the placement or disposal of these soils is done safely and in compliance with State and Federal regulations.

Question 15: Is the DEC or the new owners of this property responsible for the deed restrictions?

Response 15: The current owner of the property will be responsible to annually certify to the NYSDEC that the deed restrictions are in place and are being adhered to.

Question 16: How many years will the deed restrictions be in place?

Response 16: The deed restrictions will remain in place indefinitely.

Question 17: When will we hear what the City of Geneva is going to do with the site?

Response 17: City of Geneva representatives responded that the City is anxious to move forward with the remedy and get the site back to productive use in a timely manner.

Comment 18: I'm glad the site will be designated for commercial use and not for residential or recreational use.

Response 18: Comment noted. As a clarification, the site will be designated for commercial or industrial use.

A letter dated March 20, 2002 was received from O'Brien & Gere Engineers, Inc., which included the following two comments:

Comment 19: On Page 7 of the PRAP, column 2, second full paragraph, line 8 from the bottom, it is stated that "SVOC TICs totaled 597 ppm and VOC TICs totaled 12 ppm."

Please note that it is inappropriate to total the list of TICs that are reported by a laboratory for a sample. The instrument printout typically presents a list of TICs. The presence of each of these compounds is mutually exclusive; each successive compound on the list of TICs has a corresponding lower

APPENDIX B

Administrative Record

Market Basket Brownfield Site (B-00018-8)

July 1997	Environmental Restoration Project Application (Prepared by the City of Geneva)
September 23, 1997	Letter to: Sanford I Miller (City of Geneva) From: Michael J. O'Toole, Jr. (NYSDEC) Re: Approval of Brownfield Application
March 1998	Citizens Participation Plan (Prepared by City of Geneva)
August 1998	Site Investigation Work Plan (Prepared by Passero Associates)
October 14, 1998	Letter to: Sanford I Miller (City of Geneva) From: Michael J. O'Toole, Jr. (NYSDEC) Re: Extension to Initiate Fieldwork Until October 23, 1998
March 1999	State Assistance Contract #C300940 for Brownfield Site #B-00018-8
April 6, 2000	Letter to: Gordon P. Eddington (City of Geneva) From: Mary Jane Peachey (NYSDEC) Re: Eligibility of Building Demolition Costs
October 2000	Site Investigation Report and Remedial Alternatives Report (Prepared by Passero Associates)
February 2002	Proposed Remedial Action Plan (Prepared by NYSDEC)