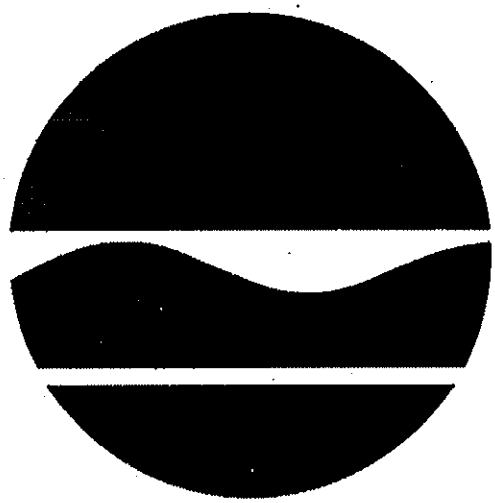
BROCKPORT LANDFILL

Town of Sweden, Monroe County, New York

Site No. 8-28-038

RECORD OF DECISION

September 1997



Prepared by:

Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

Brockport Landfill
Village of Brockport, Monroe County
Site No. 8-28-038

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Brockport Landfill Inactive Hazardous Waste Site, 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 Brockport Landfill Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) prepared by the NYSDEC. A bibliography 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 waste constituents from this site will be addressed by remedial construction activities to be completed as specified in this ROD.

Description of the Selected Remedy

The selected remedial action provides for the protection of human health and the environment by reducing the volume of leachate generated at the site, and by removing exposure to contaminants remaining at the site. The Remedial Plan is technically feasible and it complies with statutory requirements. Briefly, the selected remedial action plan includes the following:

- Construction of a new landfill cap;
- Appropriate measures to limit access to the landfill;
- A long-term, comprehensive groundwater monitoring program to monitor effectiveness of the remedy; and
- Maintenance of the landfill cap.

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.

9/26/97
Date

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

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SECTION 1: SITE LOCATION AND DESCRIPTION

The Brockport Landfill is located on East Canal Road, east of the Village of Brockport in the Town of Sweden, Monroe County, New York (see Figure 1). The site is in a sparsely populated area, bordered on the north by East Canal Road, on the south by a railroad, and on the east and west by private property. The New York State Barge Canal trends east-west to the north of East Canal Road. An intermittent stream, Otis Creek, flows northeasterly through the southern portion of the site. The creek passes under the canal through a culvert and continues northward toward Lake Ontario.

The Brockport Landfill occupies a parcel of about forty acres and contains two disposal areas. The main disposal area, used for the disposal of municipal and industrial wastes, is located in the central portion of the site and comprises about 17.5 acres. A smaller disposal area of about two acres, used for the disposal of brush and leaves, is located in the southern portion of the site, south of Otis Creek. The main disposal area was the subject of the remedial investigation and feasibility study.

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

The Brockport Landfill was operated as a municipal solid waste facility by the Village of Brockport (Village) from 1949 to 1984. In addition to municipal waste, the landfill also received waste from local industries. This industrial waste is alleged to have included waste chemicals from degreasing operations and paint solvents. The landfill was closed and covered in 1984 by the Village pursuant to a NYSDEC consent order (legal agreement).

2.2: Remedial History

In 1983 and 1984, NUS Corporation conducted a Preliminary Assessment and Site Investigation of the Brockport Landfill for the United States Environmental Protection Agency (USEPA). Results included the detection of 172 parts per billion (ppb) of trichloroethene (TCE) in a residential well located adjacent to the northeast corner of the site. The use of this residential well

was discontinued in 1985 when the Village extended public water service to residences along East Canal Road.

The site was added to the Registry of Inactive Hazardous Waste Disposal Sites in 1987 with a Class 2a designation. The classification code 2a is a temporary code assigned when there is insufficient data to properly classify a site. Ecology and Environment Engineering, P.C. conducted a Phase II Investigation for the NYSDEC to obtain additional information, and completed a report in 1991. The Phase II Investigation identified volatile organic compounds in groundwater samples located downgradient from the main disposal area at concentrations that exceeded NYSDEC groundwater standards. Based on these results, the site was reclassified to a Class 2 site: one that poses a significant threat to public health or the environment.

SECTION 3: CURRENT STATUS

In response to a determination that the presence of hazardous waste at the site presents a significant threat to human health and the environment, the Village of Brockport and three private parties [the General Electric Company (GE), Owens-Brockway Glass Container Inc. (Owens-Brockway), and Minnesota Mining and Manufacturing, Inc. (3M)] have recently completed an RI/FS.

3.1: Summary of the Remedial Investigation

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

The RI was conducted between October 1995 and November 1996. An April 3, 1997 report entitled **Remedial Investigation Report** has been prepared describing the field activities and findings of the RI in detail.

The RI included the following activities:

- Geophysical survey to define the limits of waste;
- Monitoring well installations to analyze groundwater contamination and define hydrogeologic conditions;
- Residential well sampling to ensure that existing wells were not impacted by the site;
- Surface and subsurface soil, surface water and sediment sampling to analyze for landfill contamination;
- Landfill cover soil borings and testing, and an explosive gas survey to evaluate the condition of the current cover system;

- Leachate and leachate-stained soil sampling to analyze for landfill contamination;
- Fish and Wildlife Impact Analysis to evaluate potential environmental risks; and
- Qualitative Health Risk Assessment to evaluate potential risks to human health.

To determine which media (soil, groundwater, etc.) contain contamination at levels of concern, the RI data were compared to values known as Standards, Criteria, and Guidance values, or SCGs. SCG values for water, soil and sediments come from state regulations and guidance documents governing each type of media. Groundwater, drinking water and surface water SCGs identified for the Brockport Landfill were based on NYSDEC *Ambient Water Quality Standards and Guidance Values* and Part V of NYS Sanitary Code. Soil cleanup guidelines contained in NYSDEC *Technical and Administrative Guidance Memorandum (TAGM) 4046* for the protection of groundwater, background soil conditions, and risk-based remediation criteria were used as SCGs for soil. The NYSDEC *Division of Fish and Wildlife Technical Guidance for Screening Contaminated Sediments* was used to evaluate surface water sediments.

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

Site Geology and Hydrogeology:

The Brockport Landfill is located on the eastern end of a kame moraine, a glacial deposit. This overburden material consists of layered silt and sand grading downward into a dense sandy till. The overburden thickness ranges from three to 20 feet. Groundwater in this moraine deposit ultimately discharges to Otis Creek. There is no evidence that this moraine groundwater is in direct contact with landfill waste.

Bedrock beneath the site generally consists of sandstones, with some interbedded silty shale. The bedrock is nearly flat-lying, with a dip of approximately one-half degree to the south. The upper ten to 15 feet of the bedrock comprises the shallow bedrock water-bearing zone. Groundwater in the shallow bedrock is in contact with groundwater in the moraine overlying the bedrock. Groundwater in the shallow bedrock water-bearing zone likely discharges to the Barge Canal.

Some groundwater was encountered in deep bedrock at the site. However, the low permeability of the intervening bedrock units comprises an aquitard. This aquitard limits the downward vertical migration of groundwater from the shallow bedrock water-bearing zone to the deeper regional flow zone.

Analytical results of the RI indicate that leachate is generated within the landfill waste and discharges to overburden and shallow bedrock groundwater. Overburden groundwater in the moraine and shallow bedrock water-bearing zone is contaminated by low concentrations of

volatile organic compounds (VOCs). Groundwater in the deep bedrock zone does not appear to be impacted by the landfill.

3.1.1 Nature of Contamination:

As described in the RI Report, many soil, groundwater, surface water, sediment and leachate samples were collected at the site to characterize the nature and extent of contamination. Figure 2 shows the monitoring well and sampling locations.

The primary groundwater contaminants are VOCs such as trichloroethene, dichloroethene, vinyl chloride, and benzene. The presence of these chemicals is consistent with the history of disposal of industrial and municipal waste at the landfill. Both benzene and vinyl chloride are known human carcinogens through inhalation (breathing vapors) or ingestion (drinking contaminated water).

3.1.2 Extent of Contamination

Tables 1 through 8 summarize the extent of contamination for various contaminants in groundwater, surface water, sediment, leachate, residential well water, and soil, and compare the data with applicable Standards, Criteria and Guidance values (SCGs) for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Groundwater

Two rounds of groundwater samples were collected from 16 monitoring wells: seven overburden wells, six shallow bedrock wells, and three deep bedrock wells. An additional shallow bedrock well was installed and sampled once near the end of the RI activities.

The first round of groundwater samples was analyzed for VOCs, semi-volatile organic compounds (SVOCs), polychlorinated biphenols (PCBs), pesticides, metals, as well as additional chemical parameters usually associated with landfill leachate. Based on the results of the first analytical round, a reduced list of compounds was developed for the second sampling round. This list included VOCs, metals, and selected additional chemical parameters.

Overburden Groundwater: Eight VOCs were detected in overburden groundwater above NYSDEC Class GA (fresh groundwater, a source of potable water supply) standards, as shown on Table 1. Trichloroethene was detected at the highest levels, up to 170 ppb. No SVOCs or PCBs were detected. One pesticide, heptachlor, was detected in two samples. Six metals were detected above SCGs.

Shallow Bedrock Groundwater: Thirteen VOCs were detected above SCGs in shallow bedrock groundwater, as shown on Table 2. Chlorobenzene was detected at the highest level, up to 58 ppb. No SVOCs or PCBs were detected. One pesticide, heptachlor, was detected in three samples. Eight metals were measured above SCGs.

Deep Bedrock Groundwater: Two VOCs were detected above groundwater SCGs in deep bedrock groundwater, as shown on Table 3. In the second sampling round, tetrachloroethene was detected at 5.5 ppb, slightly above the standard of 5 ppb. Methylene chloride was detected in the same well in the first sampling round at 12 ppb, above the standard of 5 ppb. Methlyene chloride was detected in another well at 9 ppb in the first sampling round. Heptachlor was detected in two wells, at 0.026 and 0.05 ppb. No PCBs or SVOCs were detected in deep bedrock groundwater. Eight metals exceeded groundwater standards in one or more wells.

Surface Water

Six surface water locations were sampled during the RI. Compounds that exceeded surface water SCGs are shown on Table 4. No VOCs, SVOCs, pesticides or PCBs were detected above Class C (fresh surface water, suitable for fish propagation and survival) standards. Five metals were detected above SCGs, including mercury. Due to possible laboratory error for mercury, each surface water location was resampled and analyzed again for mercury. No mercury was detected in those samples.

Sediment

Sediment was sampled at all six surface water sampling locations. No VOCs, SVOCs, pesticides or PCBs were detected above SCGs. Eight metals were measured at values exceeding NYSDEC sediment criteria guidance "Lowest Effect Level." (Lowest Effect Level indicates a level of sediment contamination that can be tolerated by the majority of benthic organisms.) See Table 5.

Leachate

One leachate sample was obtained from a seep on the west side of the landfill. No VOCs, SVOCs, or PCBs were detected. One pesticide, heptachlor, was detected at a low level. Five metals were detected above surface water (Class C) standards. Results are shown on Table 6.

Residential Wells

Four private water wells were sampled in the Spring of 1996 and analyzed for VOCs, SVOCs, PCBs, pesticides, metals, and the additional chemical parameters of the first round of monitoring well sampling. Traces of methylene chloride, tetrachloroethene, trichloroethene and carbon disulfide were detected in one or more of the wells. Tetrachloroethene was the only organic compound detected above groundwater or drinking water standards. These wells were resampled in November 1996 and analyzed for VOCs and metals. No VOCs were detected in this event. Several metals were measured at levels exceeding groundwater or drinking water standards in both sampling rounds. Three of these wells are located at private residences served with a municipal water supply, and the fourth is located at a cemetery. None of the wells are currently used for drinking water.

Soil

Two surface and six subsurface soil samples were collected. The surface soil samples were obtained off site and represent background conditions. No VOCs, SVOCs or PCBs were detected in the background soil samples. One pesticide, methoxychlor, was detected in one of the background samples at an estimated concentration of 0.003 ppm. It was not detected in a duplicate sample collected from the same location at the same time. Acetone was the only VOC detected in subsurface soil. It was detected in three samples, at estimated concentrations of 0.001 ppm and 0.0012 ppm. No SVOCs or PCBs were detected in subsurface soils. One pesticide, methoxychlor, was detected at an estimated concentration of 0.0048 ppm in the sample. These detections of methoxychlor are well below the SCG of 10 ppm.

Concentrations of metals in subsurface soils were generally comparable to the background soil samples. Calcium, magnesium, manganese, and sodium were the metals that most often exceeded background values. Mercury was detected in one subsurface soil sample at 0.18 ppm, but was not detected in background soil samples. Soil analytical results are shown on Table 7.

Landfill Gas

An explosive gas survey was conducted in soils at the landfill to identify the potential presence of explosive gases (methane) at or near the landfill, and to assess the potential for off site migration. Samples of soil gas (air trapped between soil particles) were obtained along the perimeter of the landfill, and also 100 feet out from the landfill. The average methane gas concentration in soils at the landfill boundary was 40 ppm. The average methane concentration in the outer sample locations was 33 ppm. All measurements were significantly below the lower explosive limit of 50,000 ppm, the SCG for methane at landfill property boundaries. The values obtained at the Brockport Landfill indicate that methane gas migration from the landfill is minimal.

3.2 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. A more detailed discussion of the health risks can be found in Section 8.0 of the RI Report.

An exposure pathway is how an individual may come into 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.

Completed pathways which are known to or may currently exist at the site include:

- ingestion of surface water and/or sediments containing leachate contaminants; and

- ingestion of groundwater containing leachate contaminants.

Surface water, sediment and groundwater sampling and analysis have shown that the concentrations of landfill contaminants in these media are currently low. Although the potential for human exposure to these contaminants exists, it is not expected that they present a significant health risk under current conditions. However, should conditions change or new groundwater wells be installed near the landfill, exposures could become of concern.

Historic analytical results indicate the presence of VOC contamination in groundwater at levels sufficiently elevated to cause concern should groundwater near the landfill be used as a potable water supply. Existing homes along East Canal Road previously used private wells but currently are supplied with municipal water. Three of the four private wells sampled during the RI are located at residences served by the municipal water supply, and the fourth is located at a cemetery. None of the private wells are now used as a drinking water supply, therefore, people are not currently being exposed to site contaminants contained in shallow bedrock groundwater.

3.3 Summary of Environmental Exposure Pathways:

This section summarizes the types of environmental exposures which may be presented by the site. The Fish and Wildlife Impact Assessment included in the RI Report presents a more detailed discussion of the potential impacts from the site to fish and wildlife resources. The following pathways for environmental exposure have been identified:

- Surface water containing concentrations exceeding NYSDEC surface water (Class C) standards for several metals; and

- Sediment containing concentrations of metals exceeding the NYSDEC *Division of Fish and Wildlife Technical Guidance for Screening Contaminated Sediments Lowest Effect Levels.*

All exceedances were minimal and no significant impacts to fish or wildlife were identified.

SECTION 4: 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 currently identified PRPs for the site are: the Village of Brockport, the County of Monroe, the General Electric Company (GE), Owens-Brockway Glass Container Inc. (Owens-Brockway), and Minnesota, Mining & Manufacturing, Inc. (3M). The Village of Brockport is the property owner and former operator of the landfill. The County of Monroe is the owner of a right-of-way across the landfill site (an old trolley bed). The County has not taken an active role in site investigation. GE, Owens-Brockway, and 3M (a.k.a. the Private Parties) are alleged to have generated hazardous waste which was disposed of at the landfill. One industry reported on a

Right-to-Know questionnaire that paint solvents and still bottoms from degreasing were disposed of at Brockport Landfill between 1949 and 1967. These wastes are currently classified as hazardous according to 6 NYCRR 371.4(b)(1) as F002 and F003, respectively.

The NYSDEC and the Village of Brockport, the County of Monroe, GE, Owens-Brockway, and 3M signed a Consent Order on May 3, 1995. The Order obligates the Village of Brockport to implement a full remedial program at the landfill, and provides for reimbursement of 50% of eligible Remedial Investigation/Feasibility Study costs to the Village by the Private Parties. The NYSDEC Consent Order allows reimbursement by the State to the Village of up to 75% of the remaining 50% of eligible remediation costs.

The following is the chronological enforcement history of this site under the inactive hazardous waste remediation program:

Order on Consent Index No. B8-0375-91-06, dated May 3, 1995, for Remedial Program

SECTION 5: SUMMARY OF THE REMEDIATION GOALS

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 should eliminate or mitigate all significant threats to the public health and to 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:

- Reduce, control, or eliminate to the extent practicable the generation of leachate within the landfill mass;
- Eliminate to the extent practicable the potential for direct human or animal contact with waste in the landfill;
- Reduce, control, or eliminate, to the extent possible, migration of contaminants from the landfill to groundwater; and
- Provide for attainment of groundwater SCGs.

SECTION 6: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy should be protective of human health and the environment, be cost effective, comply with other statutory laws and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable.

Recognizing that there are a limited number of remedial technologies applicable to closed municipal landfills, the USEPA has developed a policy to streamline the selection of remedial actions: USEPA Office of Solid Waste and Emergency Response Directive No. 9355 0-49FS, *Presumptive Remedy for CERCLA Municipal Landfill Sites.* This Directive is based on nationwide experience and establishes **containment** as the presumptive remedy for municipal landfill sites. Components of the presumptive remedy to be considered for a specific site are: landfill cap, leachate collection and treatment, groundwater control, landfill gas collection and treatment, and institutional controls to supplement engineering controls. Each of these components were evaluated for the Brockport Landfill and presented in the report entitled **Feasibility Study Report**, dated April 28, 1997.

Landfill cap: The FS Report evaluated three types of 6 NYCRR Part 360 (solid waste) landfill caps. The evaluation showed that placement of any one of the three types of caps over the landfill would be an effective alternative, reducing leachate generation and mobility of contaminants. All other presumptive remedy components were evaluated under the assumption that a landfill cap would be implemented.

Leachate collection and treatment: The FS Report considered leachate control for the Brockport Landfill, assuming that a new landfill cap would be installed. Although there have been leachate outbreaks at the Brockport Landfill, it is expected that these would be eliminated with the construction of a new low-permeability cap.

Landfill gas collection: Due to the absence of significant landfill gas production at the Brockport Landfill, an active gas collection system was not evaluated. However, passive venting would be incorporated into the cap design.

Groundwater control: It is expected that the installation of a low-permeability cap over the Brockport Landfill would significantly decrease the production of leachate and the mobility of contaminants to groundwater. Because current levels of groundwater contamination are low and there are no completed exposure pathways, active groundwater controls were not evaluated for the Brockport Landfill.

Based on the evaluations of the presumptive remedy components presented in the FS Report, the NYSDEC has prepared three remedial alternatives for this landfill. Descriptions and evaluations of the alternatives follows. As used in the following text, the time to implement reflects only the time required to implement the remedy, and does not include the time required to design the remedy, procure contracts for design and construction or to negotiate with responsible parties for implementation of the remedy.

6.1: Description of Alternatives

The potential remedies are intended to effectively control the migration of contaminants from landfill waste into groundwater, and to reduce contamination in groundwater migrating offsite to meet groundwater standards.

Alternative 1: No Action

The no action alternative is evaluated as a procedural requirement and as a basis for comparison. It would allow the site to remain in its closed, but unremediated, state. This alternative would leave the site in its present condition and would not provide any additional protection to human health or the environment. No operation and maintenance (O&M) of the landfill would occur.

Capital Cost:	$0
O&M Present Worth:	$0
Total Present Worth:	$0
Time to Implement:	No time required

Alternative 2: Institutional Actions

This alternative would consist of institutional actions for the landfill. It would provide for routine inspections and maintenance of the existing landfill cover, and long term groundwater monitoring. Physical controls would be installed around the landfill to limit access.

Capital Cost:	$ 53,600
Present Worth O&M:	$ 401,200
Total Present Worth:	$ 454,800
Time to Implement:	Three months

Alternative 3: Landfill Cap Construction, with Natural Attenuation of Leachate and Groundwater

This alternative would include construction of a modified 6 NYCRR Part 360 cap on the landfill, consisting of a low permeability layer with a hydraulic conductivity less than 1×10^{-7} centimeters per second (cm/sec), overlain by a barrier protection layer and topsoil, and with passive gas venting.

Physical controls would be installed around the perimeter of the landfill to limit access. Long-term groundwater monitoring would be implemented. A program of routine inspections and necessary maintenance of the landfill cap would be instituted.

Construction of a new cap would significantly reduce leachate generation and migration of contaminants to surface water and groundwater. Groundwater and leachate would be allowed to naturally attenuate to meet groundwater standards.

Capital Cost:	$ 1,878,700
Present Worth O&M:	$ 401,200
Total Present Worth:	$ 2,279,900
Time to Implement:	One year

6.2 Evaluation of Remedial 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 (6NYCRR Part 375). For each of the criteria, 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. **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.

Alternative 1 would not be consistent with 6 NYCRR Part 360 regulations for post-closure maintenance of the Brockport Landfill. Present site exceedances of chemical SCGs for groundwater would remain or even increase due to continued deterioration of the existing cap.

Alternative 2 would comply with 6 NYCRR Part 360 regulations for post-closure maintenance of the landfill. Present site exceedences of chemical SCGs for groundwater would remain due to continued infiltration of precipitation through the existing cover into the waste mass, causing contaminant migration to groundwater.

Alternative 3 would comply with SCGs for the Brockport Landfill. Construction of a new cap on the landfill would result in a decrease of infiltration into the landfill, allowing contaminant levels in groundwater to slowly decrease through natural attenuation to meet SCGs. A long-term groundwater monitoring program would be instituted to assure that natural attenuation of groundwater contaminants is occurring. Long-term operation and maintenance of the new landfill cap would protect against increased infiltration and possible future exposure to landfill waste.

2. **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: Because no remediation would occur, this alternative would not provide any additional protection from possible future threats to human health posed by contaminants migrating from the landfill mass. Without post-closure maintenance at the landfill, the potential for human and environmental exposures would increase as the existing landfill cover deteriorates and waste becomes exposed.

Alternative 2: Because no remediation would occur, this alternative would not provide significant additional protection from possible future threats to human health posed by contaminants migrating from the landfill mass. Regular maintenance of the existing cover would help prevent continued deterioration and possible future exposure to waste.

Alternative 3: Installation of a new cap on the landfill would eliminate most infiltration through the landfill. Through natural attenuation, groundwater contamination would be expected to eventually decrease to meet groundwater standards and any future threat to human health would decline. As such, this alternative would provide long-term effective protection to human health and the environment. With post-closure maintenance of the cap, possible future exposures to landfill waste as a result of cap deterioration would be minimal.

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

3. **Short-Term Impacts**. 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.

Alternatives 1 and 2: Because no remedial activities would occur, these alternatives would have very little or no short-term adverse impacts.

Alternative 3: This alternative would include some short-term impacts common to normal construction work. During construction, an increase in truck traffic would occur and nuisance dust and soil erosion would be possible. These impacts can be controlled with normal construction precautions. It is also possible that refuse would be exposed during cap construction activities, particularly during installation of the gas vents and/or gas venting trenches. A community air monitoring program would be instituted to protect against such impacts.

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 has no long-term effectiveness. There would be no monitoring or maintenance to protect against infiltration of water through the landfill cover into the waste mass, or erosion of the cover exposing waste. As such, the long-term effectiveness and reliability of this alternative is low.

Alternative 2 would likely not be effective over the long-term. Infiltration through the waste mass would continue at its present rate. Erosion of the cover would be controlled if properly maintained. As such, the long-term effectiveness of this alternative would be low to moderate.

Alternative 3: Construction of this cap would not treat or remove any waste from the site, however, with reduced infiltration into the landfill, groundwater contaminants would gradually decrease. The new cap would be effective in minimizing any future potential health risks if properly maintained. The long-term effectiveness and reliability of this alternative is high.

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 1 and 2 would not reduce toxicity, mobility, or volume of wastes at the site.

Alternative 3 would not reduce toxicity or volume of waste at the site. However, the cap would restrict infiltration into the landfill and significantly decrease the mobility of contaminants.

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..

Alternatives 1 and 2: Both alternatives would be easily implemented.

Alternative 3: Although this alternative requires some construction, implementation would be easily accomplished, technically and administratively. The technology is simple, materials are readily available as are qualified contractors.

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 9.

Alternative 1 would cost nothing.

Capital costs for *Alternative 2* are estimated at $ 53,600: the cost of constructing a fence around the landfill perimeter. Annual O&M would be $ 26,100. Thirty years of O&M would bring total O&M present worth costs to $ 401,200. The total present worth would be $ 454,800.

Capital costs for *Alternative 3* consist of a construction of a new cap and fencing, the estimate for which is $1,878,700. Annual O&M would be $ 26,100. Thirty years of O&M would bring O&M present worth costs to $ 401,200. The total present worth would be $ 2,279,900.

This final criterion is considered a modifying criterion and is taken into account 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 and FS Reports and the Proposed Remedial Action Plan were evaluated. A "Responsiveness Summary" that describes public comments received and the Department responses is included as Appendix A.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

Based upon the results of the RI/FS, and the evaluation presented in Section 7, the NYSDEC has selected *Alternative 3* as the remedy for this site.

This selection is based upon the review of site data and evaluation of the alternatives and their ability to meet the criteria as presented in Section 7.2.

This selection is also based on the following: Alternative 1 would not be adequately protective of human health or the environment over the long-term, nor would it comply with SCGs, particularly 6 NYCRR Part 360 requirements. Alternative 1 is rejected on that basis. Alternative 2 would not be adequately protective of human health or the environment over the long-term nor would it fully comply with SCGs. Alternative 3 will be protective of both human health and the environment, will more fully meet SCGs, including compliance with 6 NYCRR Part 360 regulations for cap construction and post-closure maintenance of the Brockport Landfill, and will be cost effective.

The estimated present worth cost to implement the remedy is $ 2,279,900. The cost to construct the remedy is estimated to be $ 1,878,700 and the estimated annual operation and maintenance cost is $ 26,100. The 30-year present worth O&M cost is $ 401,200.

The elements of the proposed remedy are as follows:

1. A remedial design 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.

2. Construction of a new landfill cap which will comply with 6 NYCRR Part 360. A low permeability layer consisting of an appropriate thickness of clay or a geomembrane with a hydraulic conductivity equal to or less than 1×10^{-7} cm/sec will be placed over a prepared subsurface. Gas vents and/or gas vent trenches will be installed to vent gas from the waste mass. A barrier protection layer will be placed over the low permeability layer, followed by a layer of topsoil. The landfill cap will then be seeded for vegetation.

3. Physical controls will be installed around the landfill to limit access.

4. Since the remedy results in untreated hazardous waste remaining at the site, a long-term groundwater monitoring program will be instituted. 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.

SECTION 8: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation 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 citizen participation activities were conducted:

- Document repositories were established for public review of project related material.
- A site mailing list was established which included nearby property owners, local political officials, local media, and other interested parties.
- A Citizen Participation Plan was prepared in October, 1993 and placed in the document repositories.
- A fact sheet was distributed to the mailing list on June 8, 1995 to describe the RI Work Plan.
- A fact sheet announcing the availability of the PRAP and the public meeting was distributed to the mailing list on July 28, 1997.
- A public comment period was held from August 1, 1997 through September 2, 1997 to receive public input on the PRAP.
- A public meeting was held on August 12, 1997 to present the PRAP and discuss and answer questions regarding the proposed remedy and the RI/FS.
- In September 1997 a Responsiveness Summary was prepared and made available to the public in this ROD to address the comments received during the public comment period for the PRAP.

MALCOLM PIRNIE

BROCKPORT LANDFILL
FEASIBILITY STUDY

SITE LOCATION

FIGURE 1

VILLAGE OF BROCKPORT
BROCKPORT, NEW YORK

NOVEMBER 1996

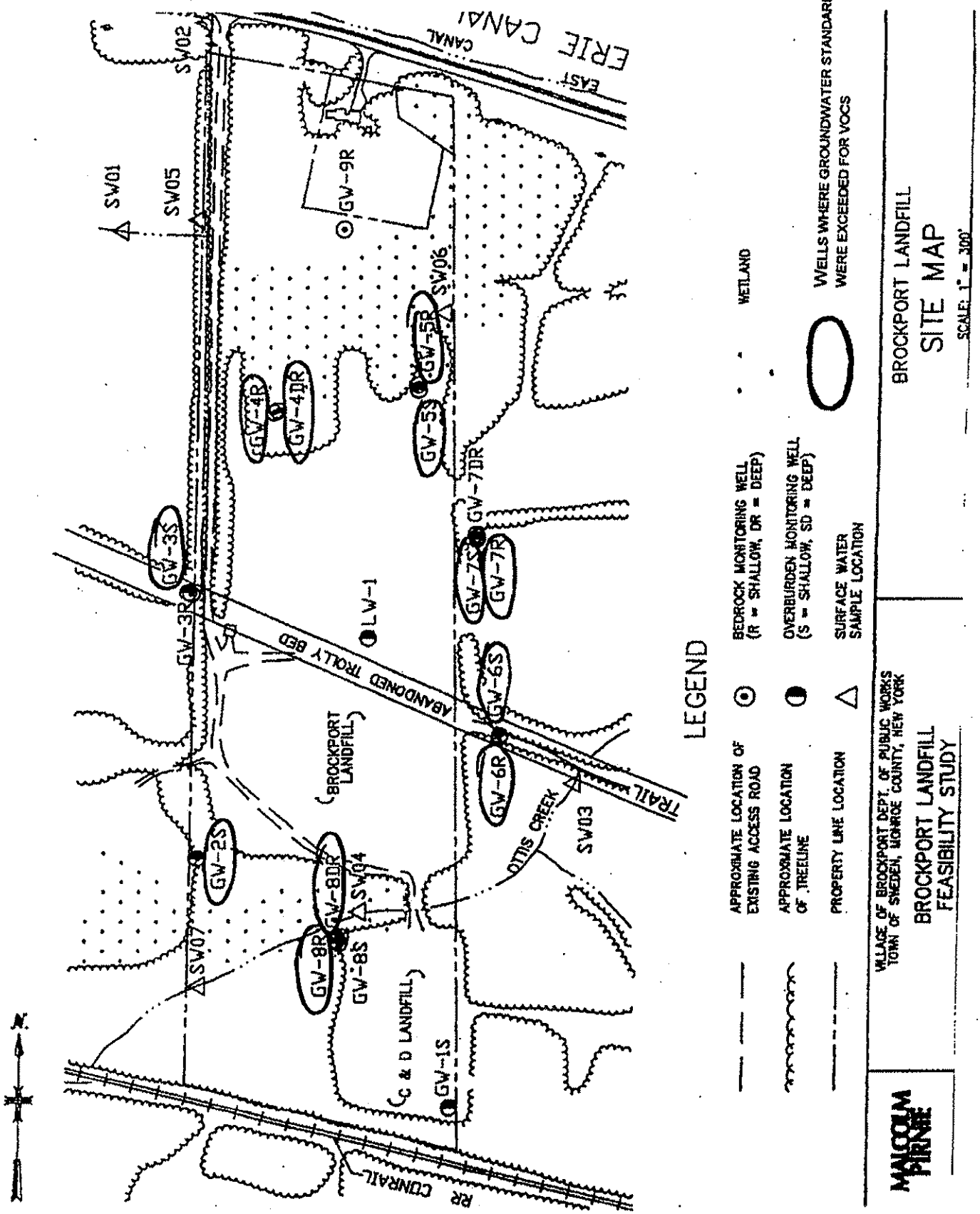
ERIE CANAL
EAST CANAL
SW01
SW02
SW03
SW04
SW05
SW06
SW07
GW-1S
GW-2S
GW-3R
GW-3S
GW-4R
GW-4DR
GW-5R
GW-5S
GW-6R
GW-6S
GW-7DR
GW-7R
GW-7S
GW-8R
GW-8DR
GW-8S
GW-9R
LW-1
ABANDONED TROLLY BED
TRAIL
BROCKPORT LANDFILL
C & D LANDFILL
OTIS CREEK
RR CONRAIL
N
LEGEND
APPROXIMATE LOCATION OF EXISTING ACCESS ROAD
APPROXIMATE LOCATION OF TREELINE
PROPERTY LINE LOCATION
BEDROCK MONITORING WELL (R = SHALLOW, DR = DEEP)
OVERBURDEN MONITORING WELL (S = SHALLOW, SD = DEEP)
SURFACE WATER SAMPLE LOCATION
WETLAND
WELLS WHERE GROUNDWATER STANDARDS WERE EXCEEDED FOR VOCS
MALCOLM PIRNIE
VILLAGE OF BROCKPORT DEPT. OF PUBLIC WORKS
TOWN OF SWEDEN, MONROE COUNTY, NEW YORK
BROCKPORT LANDFILL
FEASIBILITY STUDY
BROCKPORT LANDFILL
SITE MAP
SCALE: 1" = 300'

FIGURE 2

Table 1
Nature and Extent of Contamination

Overburden Groundwater

Compounds that Exceed Groundwater Standards

CLASS	CONTAMINANT	CONCENTRATION RANGE (ppb)	FREQUENCY of EXCEEDING SCGs	SCG (ppb)
Volatile Organic Compounds (VOCs)	Benzene	ND-7.6	1 of 14	0.7
	Chloroethane	ND-12	2 of 14	5
	Chloromethane	ND-5.2	1 of 14	5
	1,2 Dichloroethene	ND-17	1 of 14	5
	Methylene Chloride	ND-11	2 of 14	5
	Trichloroethene	ND-170	3 of 14	5
	Xylene	ND-5.5	1 of 14	5
	Vinyl Chloride	ND-14	4 of 14	2
Semivolatile Organic Compounds (SVOCs)	none			
Pest/PCBs	Heptachlor (pest)	ND-0.064	2 of 7	ND
Metals	Antimony	ND-5.2	4 of 14	2
	Iron	233-8,760	13 of 14	300
	Magnesium	2,870-95,000	5 of 14	35,000
	Manganese	9.5-1,270	5 of 14	300
	Thallium	ND-11.2	2 of 14	4

Seven overburden wells, each sampled twice for a total of 14 overburden groundwater samples.
Pesticides and PCBs analyses were not included in the second round.
ND = Not Detected
ppb = parts per billion
SCG = Standards, Criteria and Guidance

Table 2
Nature and Extent of Contamination
Shallow Bedrock Groundwater
Compounds that Exceed Groundwater Standards

CLASS	CONTAMINANT	CONCENTRATION RANGE (ppb)	FREQUENCY of EXCEEDING SCGs	SCG (ppb)
Volatile Organic Compounds (VOCs)	Benzene	ND-9	2 of 14	0.7
	Chlorobenzene	ND-58	2 of 14	5
	Chloroform	ND-9.8	1 of 14	7
	Chloroethane	ND-28	5 of 14	5
	Chloromethane	ND-12	3 of 14	5
	1,1 Dichloroethane	ND-16	2 of 14	5
	1,2 Dichloroethene	ND-10	2 of 14	5
	Ethylbenzene	ND-7	1 of 14	5
	Methylene Chloride	ND-8.8	2 of 14	5
	Tetrachloroethene	ND-6.5	1 of 14	5
	Trichloroethene	ND-27	2 of 14	5
	Xylene	ND-14	2 of 14	5
	Vinyl Chloride	ND-15	3 of 14	2
Semivolatile Organic Compounds(SVOCs)	none			
Pest/PCBs	Heptachlor (pest)	ND-0.067	3 of 7	ND
Metals	Antimony	ND-6.3	3 of 14	2
	Arsenic	ND-51.5	3 of 14	25
	Barium	ND-10,700	5 of 14	1,000
	Iron	1,400-17,600	14 of 14	300
	Magnesium	9,830-89,400	10 of 14	35,000
	Manganese	59.6-2,800	7 of 14	300
	Thallium	ND-8.9	1 of 14	4

ND = Not Detected ppb = parts per billion SCG = Standards, Criteria and Guidance

Seven shallow bedrock wells, six sampled twice, one with a duplicate sample, and one well sampled once, for a total of 14 samples. Pesticides and PCBs analyses were not included in the second round.

Table 3
Nature and Extent of Contamination

Deep Bedrock Groundwater

Compounds that Exceed Groundwater Standards

CLASS	CONTAMINANT	CONCENTRATION RANGE (ppb)	FREQUENCY of EXCEEDING SCGs	SCG (ppb)
Volatile Organic Compounds (VOCs)	Methylene Chloride	2.1-12	2 of 6	5
	Tetrachloroethene	1.2-5.5	1 of 6	5
Semivolatile Organic Compounds (SVOCs)	none			
Pest/PCBs	Heptachlor	ND-0.05	2 of 3	ND
Metals	Antimony	ND-4.5	1 of 6	2
	Barium	37.1-2,120	2 of 6	1,000
	Iron	216-6,360	4 of 6	300
	Lead	7-27	1 of 6	25
	Magnesium	16,800-212,000	2 of 6	35,000
	Manganese	116-1,350	2 of 6	300
	Thallium	ND-10.5	1 of 6	4

ND = Not Detected
ppb = parts per billion
SCG = Standards, Criteria and Guidance
Three deep bedrock wells, each sampled twice, for a total of six samples. Pesticides and PCBs analyses were not included in the second round.

Table 4
Nature and Extent of Contamination

Surface Water

Compounds that Exceed Standards

CLASS	CONTAMINANT	CONCENTRATION RANGE (ppb)	FREQUENCY of EXCEEDING SCGs	SCG (ppb)
Volatile Organic Compounds (VOCs)	None			
Semivolatile Organic Compounds (SVOCs)	None			
Pest/PCBs	None			
Metals	Aluminum	ND-193	2 of 7	100
	Copper	1.4-23.9	1 of 7	11.4
	Lead	ND-3.2	1 of 7	3.1
	Mercury	ND-0.76	3 of 14*	0.2
	Silver	ND-3.5	2 of 7	0.1

Six surface water locations and one duplicate sample.

ND = Not Detected
ppb = parts per billion
SCG = Standards, Criteria and Guidance

*Due to questionable data, all seven sampling locations were resampled and analyzed for mercury. Results of the resampling were non-detect.

Table 5
Nature and Extent of Contamination

Sediment

Compounds that Exceeded SCGs

CLASS	CONTAMINANT	CONCENTRATION RANGE (ppm)	FREQUENCY of EXCEEDING SCGs	SCG (ppm)*
Volatile Organic Compounds (VOCs)	None			
Semivolatile Organic Compounds (SVOCs)	None			
Pest/PCBs	None			
Metals	Cadmium	ND-4.9	2 of 7	0.6 (9)
	Copper	13-82.9	5 of 7	16 (110)
	Iron	7,860-20,400	2 of 7	20,000 (40,000)
	Lead	12.6-34.5	1 of 7	31 (110)
	Manganese	183-574	1 of 7	460 (1,100)
	Nickel	10.9-18.4	2 of 7	16 (50)
	Silver	0.74-3.5	6 of 7	1 (2.2)
	Zinc	60.4-199	1 of 7	120 (270)

* SCG is NYSDEC Technical Guidance for Screening Contaminated Sediments. First number is January 24, 1997 Lowest Effect Level criteria, value in parenthesis is Severe Effect Level criteria.

Six sediment samples and one duplicate sample

ND = Not Detected
ppm = parts per million
SCG = Standards, Criteria and Guidance

Table 6
Nature and Extent of Contamination

Leachate

Compounds that Exceed Surface Water (Class C) Standards

CLASS	CONTAMINANT	CONCENTRATION RANGE (ppb)	FREQUENCY of EXCEEDING SCGs	SCG (ppb)
Volatile Organic Compounds (VOCs)	none			
Semivolatile Organic Compounds (SVOCs)	none			
Pest/PCBs	Heptachlor	0.032	1 of 1	0.001
Metals	Aluminum	3,040	1 of 1	100
	Copper	50.7	1 of 1	11.4
	Iron	8,150	1 of 1	300
	Manganese	393	1 of 1	300
	Zinc	111	1 of 1	30

One leachate sample from a seep on the west face of the landfill. Although there are no SCGs for leachate, NYS Surface Water Class C standards are shown for comparison.

ND = Not Detected
ppb = parts per billion
SCG = Standards, Criteria and Guidance

Table 7
Nature and Extent of Contamination

Soil

Compounds that Exceed Soil SCGs

CLASS	CONTAMINANT	CONCENTRATION RANGE (ppm)	FREQUENCY of EXCEEDING SCGs	SCG (ppm)
Volatile Organic Compounds (VOCs)	none			
Semivolatile Organic Compounds (SVOCs)	none			
Pest/PCBs	none			
Metals	Barium	20.2-580	1 of 11	142 (SB)
	Lead	2.8-23.4	4 of 11	11.4 (SB)
	Magnesium	2,180-29,000	7 of 11	5,660 (SB)
	Manganese	118-525	9 of 11	313 (SB)
	Mercury	ND-0.18	1 of 11	0.1
	Nickel	5.7-17.5	1 of 11	13 (SB)
	Potassium	743-2,270	4 of 11	1,280 (SB)
	Zinc	10.5-124	2 of 11	66.1 (SB)

SCGs from NYSDEC TAGM 4046, Appendix A fixed values or Site Background (SB)

Six subsurface soil samples, four leachate-stained soil samples, one duplicate, for a total of 11 samples.

ND = Not Detected
ppm = parts per million
SCG = Standards, Criteria and Guidance

Table 8

Remedial Alternative Costs

Remedial Alternative	Capital Cost	Annual O&M	30 Yr. O&M Present Worth	Total Present Worth
Alternative 1: No Action	$0	$0	$0	$0
Alternative 2: Institutional Actions	$ 53,600	$ 26,100	$ 401,200	$ 454,800
Alternative 3: Modified 360 Cap with Monitoring	$ 1,878,700	$ 26,100	$ 401,200	$ 2,279,900

30 year O&M costs represent present worth at 5%

APPENDIX A

RESPONSIVENESS SUMMARY

BROCKPORT LANDFILL

Proposed Remedial Action Plan

Brockport (Village), Monroe County
Site No. 8-28-038

The Proposed Remedial Action Plan (PRAP) for the Brockport Landfill was prepared by the New York State Department of Environmental Conservation (NYSDEC) with input from the New York State Department of Health (NYSDOH) and issued to the public on August 1, 1997. This Plan outlined the basis for the recommended remedial action at the Brockport Landfill and provided opportunities for public input prior to final remedy selection. The selected remedy consists of construction of a modified Part 360 cap, long term groundwater monitoring, and maintenance of the landfill cap.

A public meeting was held on August 12, 1997, and included a presentation of the RI and FS, as well as a discussion of the PRAP. The meeting provided an opportunity for citizens to discuss their concerns and to ask questions and comment on the proposed decision. The public was also encouraged to provide written comments on the RI/FS and PRAP. The public comment period closed on September 2, 1997.

This Responsiveness Summary responds to the questions and comments raised at the August 12, 1997 public meeting as well as to written comments received by NYSDEC. The following are comments received at the public meeting, with responses of the NYSDEC and NYSDOH:

Question 1: *I own land adjacent to the landfill. I used to farm this land, but the surface runoff from the landfill has turned it into a wetland. Can I farm this land? Would the crops be contaminated? I used to have dairy cattle, and I had problems with bacteria in the milk. I gave the cows water from the creek near the landfill.*

Answer 1: Design of the new cap for the landfill will take into account the need for surface drainage to prevent runoff from going onto adjacent properties. Frequent inspections will take place to ensure the new drainage ditches work properly. The recently completed investigation gives data on current conditions at the landfill. The information now available for the site does not suggest that crops grown on land adjacent to the landfill would become contaminated. However, there is not much information available on what may have happened twenty or thirty years ago to draw any definitive conclusions regarding crop contamination or bacteria

contamination in your cows' milk. Bacteria could have come from the landfill if significant amounts of sludge were disposed of there, however, farming practices could also have much to do with introduction of bacteria into the milk stream.

Question 2: *Won't this plan raise the height of the landfill by two feet? Isn't it against the law to elevate land more than four feet above adjacent land? Already this landfill is over that four feet limit, and now you're talking about putting another two feet over that.*

Answer 2: The NYSDEC does not know of the cited four foot height restriction and was unable to confirm its existence. New York State solid waste landfill regulations (6NYCRR Part 360) do place a height restriction of 200 feet above existing land surface for any new or expanding landfills. The new cap will be designed to comply with all existing state regulations. The Brockport Landfill height will increase somewhat with capping efforts, but only by the minimum amount needed for proper construction.

Question 3: *What division of the DEC has regulatory oversight of this project? Recognizing the fact that you are adopting a lot of the Solid Waste regulations for the cover system and post-closure monitoring, what is the possibility of delisting the site and turning it over to the Division of Solid Waste? The Village could get financial assistance from the Solid Waste landfill closure program and the post-closure monitoring system would be more than what is proposed under the Hazardous Waste program. The NYSDEC should delist the site: you are proposing to let the groundwater contaminants naturally attenuate, and the leachate was not significantly contaminated. This suggests the landfill does not pose a significant environmental threat. NYSDEC's labeling of the landfill as a hazardous waste site is overkill, and the hazardous waste stigma should be removed.*

Answer 3: The Division of Environmental Remediation will continue to provide oversight for implementation of the cleanup plan and long term monitoring of the site. Because there is documented disposal of significant quantities of hazardous waste at the landfill, it will remain in this program and not be transferred to another program. The Village of Brockport may receive 75% reimbursement of its eligible construction costs through the 1986 Environmental Quality Bond Act (EQBA) fund.

Question 4: *Has a study been made for practical use of the landfill after it is capped? Could a marketable product be planted so the landfill would be profitable instead of another cost for the Village? What about allowing a private company to collect methane gas from the landfill, or privatizing the landfill?*

Answer 4: There are limits on the types of activities that are acceptable for closed inactive hazardous waste landfills. Structures and woody growth plants are not appropriate uses because their roots or foundations could penetrate the cap, allowing rain or snow to enter the waste mass. It is possible that access could be established for a pedestrian walkway or bikeway connection to the trolley bed on either side of the landfill. The Village has the option of exploring compatible, innovative post-closure uses for the landfill property. Methane production will be minimal and not cost effective due to the small size of the landfill and length of time since waste was disposed. The majority of methane gas generation occurs within ten years of landfill closure, and this landfill was closed in 1984.

Question 5: *Is it correct that there is no human health threat as long as no one drinks the groundwater from a well or swims in contaminated water? What about water going into the canal and farmers on the other side of the canal that irrigate crops with the water?*

Answer 5: There is no human health threat unless shallow groundwater from directly beneath the landfill is ingested. Data from site monitoring wells show that contaminant concentrations decrease through natural attenuation as one moves away from the landfill. These concentrations are expected to be undetectable by the time the groundwater has traveled the distance to the canal.

Question 6: *Once the landfill is capped, what will its classification be? What is the time frame for that to happen?*

Answer 6: When construction activities are complete and the NYSDEC has accepted construction completion, the landfill will be reassigned to Class 4: Site properly closed- requires continued management. It is difficult at this time to say with certainty how long the remainder of the project will take. It is possible that cap construction can start in the spring of 1998 and be completed in one construction season. However, it is not be unusual for consent order negotiation, cap design and construction for a project of this type to take two years. The Village is obligated to move ahead with cap design, however, the private parties have been discussing terms of a new consent order with the NYSDEC and the Village to extend financial support for design, construction, and long-term monitoring of the landfill. This consent order could take a number of months to complete. Landfill cap design could take from four to eight months from initiation to final NYSDEC approval. Design and consent order negotiations can take place simultaneously.

Question 7: *What qualifies the Village of Brockport for State reimbursement for this project? Do the private parties also qualify for reimbursement? If this was a privately owned landfill, would it qualify for reimbursement funds?*

Answer 7: The Village is eligible to be reimbursed with 1986 EQBA funds for up to 75% of its total eligible costs for this remedial project because the landfill was owned and operated by the Village and because the Village has entered into a legal agreement to implement a remedial program. The private parties do not qualify for State assistance under the 1986 EQBA. Private landfills also do not qualify for assistance.

Question 8: *Is it possible to pump the existing groundwater monitoring wells to treat contaminated groundwater? What is the volume of water flowing through these wells? What about the deep wells?*

Answer 8: The monitoring wells were intended for investigative purposes only. With a diameter of less than two inches, they are too small to be used as an effective pump and treat system. No significant levels of landfill contamination were detected in the deep monitoring wells.

Question 9: *Will residents be notified when the site is reclassed to a class 4? Were residents notified when the site was reclassified from class 2a to 2?*

Answer 9: NYSDEC will notify residents of future site reclassification. This is in compliance with the 1992 revision of 6 NYCRR Part 375 (New York State inactive hazardous waste program) that requires notification of adjacent property owners for all site class changes. This requirement was not in effect in 1991 when the Brockport Landfill site was reclassified from Class 2a to Class 2.

One letter was received during the public comment period: The General Electric Company comments that the actual long-term monitoring costs may be slightly higher than those estimated in the PRAP. A more expensive analytical method for quantifying volatile organic compounds (VOCs) may be required. However, this additional minor cost does not impact remedy selection for the Brockport Landfill, and the specific VOC analytical method will be determined during preparation of the Operation and Maintenance Manual.

NYSDEC response: We agree that the specific VOC analytical method will be determined during preparation of the Operation and Maintenance Manual. The comparative costs of the alternatives evaluated in the PRAP are not affected by a change in method, therefore, it is not necessary to revise them in the ROD.

APPENDIX B

ADMINISTRATIVE RECORD

BROCKPORT LANDFILL

RECORD OF DECISION

Brockport (Village), Monroe County
Site No. 8-28-038

The following documents constitute the Administrative Record for the Brockport Landfill Inactive Hazardous Waste Site Record of Decision:

Responsiveness Summary for Remedial Investigation/Feasibility Study and Proposed Remedial Action Plan (Appendix A of ROD), September 1997.

Proposed Remedial Action Plan, Brockport Landfill, prepared by NYSDEC, July 1997.

Feasibility Study Report, prepared by Larsen Engineers and Malcolm Pirnie, Inc., April 28, 1997.

Remedial Investigation Report, Brockport Landfill, Volumes I and II, prepared by Larsen Engineers and Malcolm Pirnie, Inc., April 3, 1997.

Remedial Investigation Report Addendum, Brockport Landfill, prepared by Larsen Engineers and Malcolm Pirnie, Inc., February 27, 1997.

Remedial Investigation/Feasibility Study Citizen Participation Plan, prepared by Larsen Engineers and Malcolm Pirnie, Inc., October 28, 1993.

Remedial Investigation/Feasibility Study Work Plan, prepared by Larsen Engineers and Malcolm Pirnie, Inc., October 28, 1993.

Brockport Landfill Phase II Investigation, prepared by Ecology and Environment Engineering, April 1991.

Order on Consent #B8-0375-91-06, May 3, 1995.

State Assistance Contract # C300375, November 11, 1995.

Letter dated August 27, 1997 from General Electric Company regarding the PRAP.