Department of Environmental Conservation

Division of Hazardous Waste Remediation

Mamaroneck Taylor's Lane Compost

Westchester County, New York
Site Number 360021

Record of Decision

December 1993

Funded Under Title *3* **of** the
1986 Environmental Quality Bond Act

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

DECLARATION STATEMENT - RECORD OF DECISION

Mamaroneck Taylor's Lane Compost
Village of Mamaroneck
Westchester County, New York
Site Code: 360021

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Mamaroneck Taylor's Lane Compost hazardous waste site which was chosen in accordance with the New York State Environmental Conservation Law (ECL), and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC Section 9601, et., seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA).

The decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Mamaroneck Taylor's Lane Compost Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

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

Description of Selected Remedy

Based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) for the Mamaroneck Taylor's Lane Compost site and the criteria identified for evaluation of alternatives the NYSDEC has selected, a 6NYCRR Part 360 cap with drainage controls and a contingent groundwater remedy. The groundwater remedy will be instituted if specific Target Compound List contaminants are shown to be migrating off-site in quantities detrimental to Magid Pond or Otter Creek. Six groundwater monitoring wells will be installed on the west side of Taylor's Lane to determine if migration is occurring.

The site will be fenced and will have deed restrictions to prevent future uses of the site that would interfere with the remedial measures. The cap will use engineering designs to eliminate direct exposure to the soils, prevent infiltration of water through these soils and minimize impacts to surrounding properties.

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. Waivers are justified for applicable or relevant and appropriate requirements that will not be met. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable.

December 7, 1993
Date

Ann Hill DeBarbieri
Deputy Commissioner
Office of Environmental Remediation
New York State Department of Environmental Conservation

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I. Site Location and Description

The Mamaroneck Taylor's Lane Compost site is located on Taylor's Lane in the Village of Mamaroneck, Westchester County, New York (Figure 1). The property is approximately 8 acres in size. It is bounded by Taylor's Lane to the west, commercial properties to the north, private residential properties to the east, and Shadow Lane to the south. Across Taylor's Lane is Magid Pond, a freshwater pond and wetland area. The site has large piles of composted and partially composted leaves. In addition, there are piles of tree stumps and construction and demolition debris.

II. Site History

The Mamaroneck Taylor's Lane Compost site (hereafter known as the site) is owned by the Village of Mamaroneck (the Village). Since the late 1970's, the southern six acres of the site have been used to compost leaves and to dispose of tree trunks and wood chips.

In 1986 a senior citizen's housing project was proposed for the northeast corner of the site property. During the environmental impact study, it was discovered that the property had been used as a landfill prior to 1970. The Village of Mamaroneck and nearby businesses reported that the site was a former municipal dump which also received industrial wastes from the 1950's to the early 1970'8. The land was mined for gravel and the open pits reportedly were filled with industrial liquids, solids, and drums. In addition, incinerator wastes and other industrial wastes were reportedly disposed on the site. A limited investigation in 1987 uncovered drums, decomposed drum fragments and wastes which were determined to be hazardous. Drums which could be removed from the ground were placed in containers on-site and will be removed as part of the proposed remedial action. The site was placed on the NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites (Site No. 360021) in December 1988, and the site was designated a "Class 2" inactive hazardous waste site. The Village of Mamaroneck entered into an Order on Consent in August 1989 to begin the remedial process at the site.

The Village contracted Malcolm Pirnie, Inc. to perform the required Remedial Investigation/Feasibility Study (RI/FS). During the period of November 1989 through August 1990, Malcolm Pirnie conducted field investigation activities required by the NYSDEC approved work plan. The findings of this investigation led to additional field investigations during the period from December 1991 to May 1992. These studies are summarized below but can be reviewed in greater detail from the actual RI and FS reports.

111. Enforcement Status

Order on Consent

Date: August 14,1989
Index No.: W-3-0309-89-05
Subject of Order:
Implementation of Remedial Program

The 1986 Environmental Quality Bond Act is being used to reimburse the Village for up to 75 percent (75%) of the eligible costs for the remedial program.

IV. Current Site Status

A. Summary of Field Investiaations:

The Remedial Investigation was conducted in accordance with plans formally approved by the NYSDEC in April 1990. Site investigation activities were undertaken to characterize the surface and subsurface conditions at the site, including the extent of soil contamination, groundwater contamination and flow patterns, and any impacts that the site might be having on the environment. The initial investigation included historical research; geophysical investigation; 44 trenches; 19 soil borings; 9 hand borings; 25 fill/soil sample analyses for Target Compound and Target Analyte Lists (13 soil borings, 6 trench samples, 4 monitoring well borings and 2 hand borings); drilling and construction of 12 groundwater monitoring wells; in-situ hydraulic conductivity testing of the completed wells; determination of groundwater flow velocities; two rounds of sampling €or chemical analysis of groundwater; two rounds of surface water and sediments from Magid Pond and Otter Creek.

A supplemental investigation was conducted to further define the extent of groundwater contamination and to provide information needed to evaluate treatment technology applications for this site. This supplemental Remedial Investigation

was conducted between December 1991 and May 1992 and included the following activities: drilling and construction of 3 monitoring wells and 7 piezometers; one round of sampling for chemical analysis of groundwater; one surface water sample from a low lying area in the southwest corner of the site; two sediment samples from Pryor Marsh Pond as a representative Westchester County background wetland; a pump test and a groundwater treatability study was conducted on a well in the fill.

For more detailed information regarding the Remedial Investigation or for additional regional information, refer to the Remedial Investigation Report, dated June 1992 and Supplemental Remedial Investigation dated September 1992.

B. Conditions/Contaminants of Concern and Risk:

The Remedial Investigation (RI) was conducted by the consulting firm of Malcolm Pirnie, Inc. (MPI). The Remedial Investigation found the fill has a maximum thickness of 16 feet, and the fill is contaminated with polychlorinated biphenyls (PCBs), pesticides, heavy metals, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The levels of contamination varied across the site. Unfortunately, there was no area which could be called a "hot spot" that would allow removal of significant quantities of hazardous waste.

Soil/Waste Sampling Results

The level of PCB contamination in the fill ranged from not detected to 35 ppm (6/25 samples greater than 1 ppm).

The level of pesticides contamination ranged from < 1 ppm to 16 ppm (11/25 samples greater than 1 ppm). The pesticides encountered most frequently are 4,4-DDE, alpha-BHC, gamma-BHC, delta-BHC, alpha-chlordane, and gamma-chlordane.

The level of semivolatile compounds (SVOCs) in the fill ranged from 1 ppm to 231 ppm (22/25 samples greater than 1 ppm). The SVOCs encountered most often were naphalene, fluoranthene, chrysene and phenanthrene.

The level of volatile organic compounds (VOCs) in the fill ranged from < 1 ppm to 356 ppm (5/27 samples greater than 1 ppm). The most frequently encountered VOCs were acetone, ethylbenzene, toluene, xylene, benzene and methylene chloride.

Inorganic compounds in the fill were varied but the contaminants of concern had concentration ranges as follows: lead 26 to 4030 ppm, chromium < 1 to 123 ppm, zinc 102 to 9480 ppm, and arsenic < 1 to 48 ppm.

ppm - parts per million

Groundwater/Leachate Sampling Results

Groundwater is usually within three feet of the surface at this site and saturates most of the fill. The water saturating the fill is referred to as leachate. The leachate contamination was much greater than the groundwater found under the site. This might be attributed to the nature of the fill (high organic carbon content) and a peat layer underlying the fill both which tend to retard the movement of contaminants.

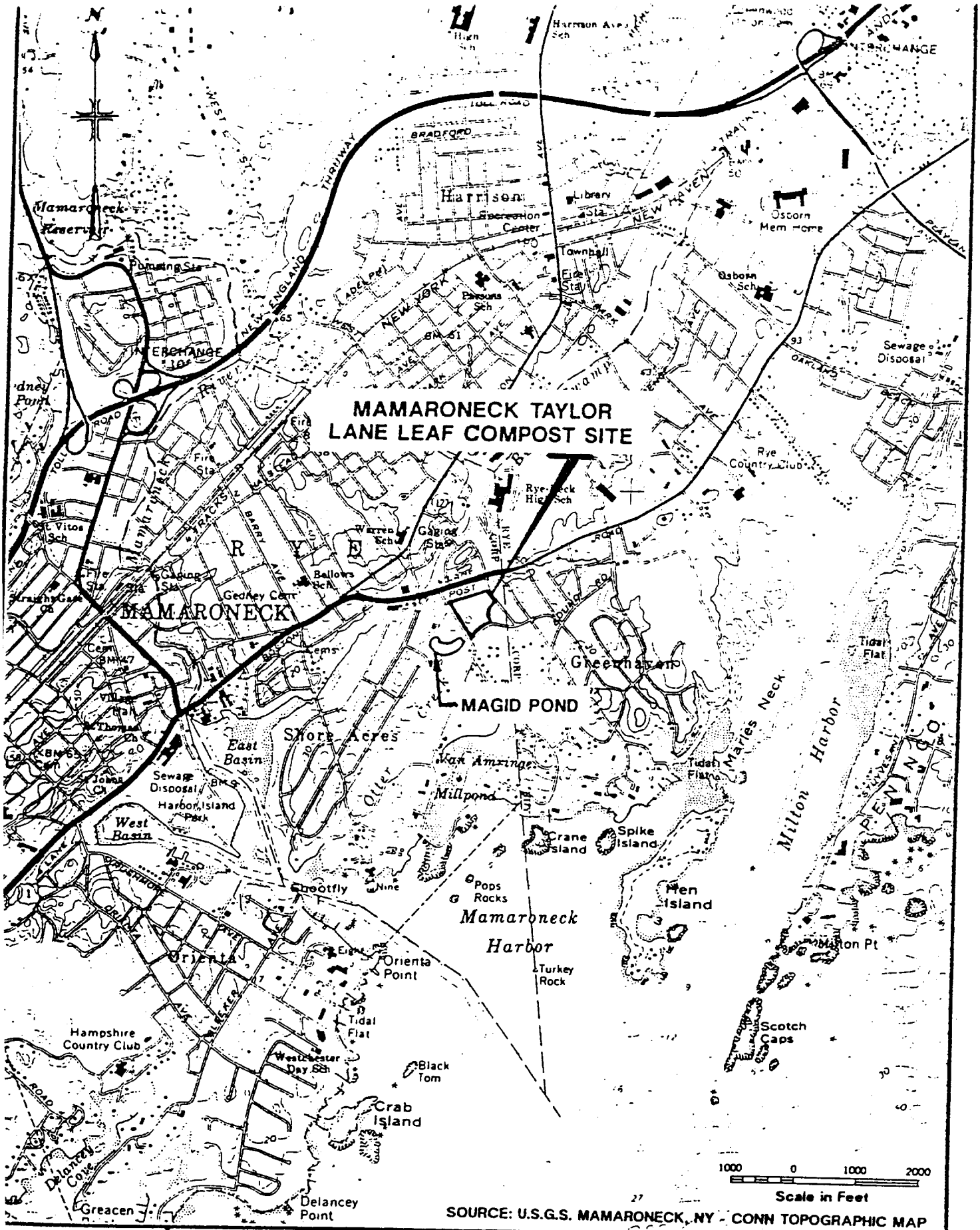
The Remedial Investigation revealed the following contaminant concentrations in the leachate and groundwater and the frequency of samples in which they were detected:

Leachate:	Frequency:
VOCs ND to 26,760 ppb (9/19)	
SVOCs ND to 890 ppb (11/19)	
PCBs ND to 420 ppb (6/19)	
Lead 2 to 15300 ppb	(19/19)
Iron 195000 to 551000 ppb	(19/19)
Pesticides ND to 870 ppb	(12/19)
Groundwater:	
VOCs ND to 195 ppb	(8/16)
SVOCS ND to 84 ppb	(9/19)
PCBs ND	)
Lead 10 to 65 ppb	(16/16)
Iron 1310 to 22800 ppb	(16/16)
Pesticides ND to 1.25 ppb	(7/16)

ND - Not Detected
ppb - parts per billion

Environmental and Human Health Risk Assessments

The Risk Assessment for the Taylor's Lane site shows unacceptable risks to individuals onsite from inadvertent ingestion of, or direct contact with contaminated soils. Semivolatile organic



MALCOLM PIRNIE

VILLAGE OF MAMARONECK, NEW YORK

MAMARONECK TAYLOR LANE LEAF COMPOST SITE

LOCATION MAP

MALCOLM PIRNIE, INC.

A. Description of the Remedial Alternatives:

The Mamaroneck Taylor's Lane Compost site has been evaluated as a single "operable unit." That is, the site remedial alternatives evaluation would not benefit from dividing the site into separate units.

The FS screened each alternative for technical implementability and effectiveness in achieving the remedial goals. The following section describes the alternatives which passed through the screening process and were considered in the detailed analysis. More complete descriptions of the alternatives can be found in the RI/FS Report.

The FS Report presents six alternatives:

Alternative 1 is No Action with Institutional controls and continued monitoring. This would require installing six new monitoring wells, fence replacement and institutional controls including, but limited to, deed restrictions.

Present Worth:	$ 402,000.
Annual Cost:	$ 8,000.
Capital Cost:	$ 279,000.
Time to Implement:	8 weeks

Alternative 2A is a 6NYCRR Part 360 Cap over the entire site with no hydrological controls or containment of leachate/groundwater. This alternative would require clearing the area of trees, regrading areas of the site to achieve minimum slopes, a gas venting layer, a low permeability barrier layer, a barrier protection layer, topsoil and replacing the fence. Institutional controls including, but not limited .to , deed restrictions would be required.

Present Worth:	$ 3,446,000.
Annual Cost:	$ 41,000.
Capital Cost:	$ 2,816,000.
Time to Implement:	12 months

Alternative 2B is a 6NYCRR Part 360 Cap over the entire site with hydrological control via slurry walls and two containment wells, on-site pretreatment of leachate/groundwater and disposal at a POTW. This alternative would require clearing the area of trees, regrading areas of the site to achieve minimum slopes, a gas venting layer, a low permeability barrier layer, a barrier protection layer, topsoil and replacing the fence. A slurry wall would be placed around the perimeter of the site and keyed into or connected with the bedrock. Two containment wells placed in the sand below the fill would dewater the area under the cap. This water (40 gpm) would be treated on-site and discharged to a POTW. Institutional controls including, but not limited to, deed restrictions would be required.

Present Worth:	$ 7,332,000.
Annual Cost:	$ 172,000.
Capital Cost:	$ 4,688,000.
Time to Implement:	18 months

Alternative 2C is a 6NYCRR Part 360 Cap over the entire site with hydrological control of leachate/groundwater via trenches with two containment wells, on-site treatment of leachate/groundwater and disposal at a POTW. This alternative would require clearing the area of trees, regrading areas of the site to achieve minimum slopes, a gas venting layer, a low permeability barrier layer, a barrier protection layer, topsoil and replacing the fence. A trench would be installed across the downgradient side of the site to collect leachate. Two pumping wells would be placed below the site to control groundwater migration. The collected water (100 gpm from the trench, 20 gpm from each well, 140 gpm total) from the trench and wells will be treated on-site and discharged to a POTW. Institutional controls including, but not limited to , deed restrictions would be required.

Present Worth:	$ 9,730,000.
Annual Cost:	$ 375,000.
Capital Cost:	$ 3,965,000.
Time to Implement:	18 months

Alternative 2D is a 6NYCRR Part 360 Cap over the entire site with hydrological control of the leachate/groundwater via upgradient groundwater diversion using both a slurry wall and french drain, a downgradient trench with on-site preteatment of groundwater and disposal at a POTW. This alternative would require clearing the area of trees, regrading areas of the site to achieve minimum slopes, a gas venting layer, a low permeability barrier layer, a barrier protection layer, topsoil and replacing

the fence. Upgradient groundwater would be diverted using a slurry wall and french drain. Groundwater downgradient of the site would be collected using a trench and this water would be treated on-site prior to discharge to a POTW. Institutional controls including, but not limited to, deed restrictions would be required.

Present Worth: $ 11,305,000.
Annual Cost: $ 375,000.
Capital Cost: $ 5,540,000.
Time to Implement: 18 months

Alternative 3 is excavation of the fill and on-site Solidification/Stabilization with temporary on-site pretreatment of water from dewatering of the fill. Prior to excavation, dewatering would have to be done. For this alternative, four trenches would be installed, three perpendicular to groundwater flow. These would be pumped until the fill is dewatered. Initial flows would be approximately 400 gpm. There would be on-site pretreatment of the water and subsequent discharge to a POTW.

Present Worth: $ 55,878,000.
Annual Cost: $ 8,000.
Capital Cost: $ 55,755,000.
rime to Implement: 27 months

Groundwater has been impacted from this site. To achieve SCGs and prevent Further degradation of the resource, groundwater would need to be collected. The groundwater flows toward Magid Pond. It is therefore possible to treat all groundwater that leaves the site by installing a collection system between the site and Magid Pond and thereby protect the groundwater and surface water resources downgradient.

1 Evaluation of Alternatives

During the detailed evaluation of remedial alternatives, each alternative is assessed against the seven evaluation criteria described below:

- Compliance with Applicable or Relevant and Appropriate New York State Standards. Criteria and Guidance (SCGs)

This criterion is used to determine ow the alternative complies with the tandards and Criteria or if a waiver is equired and how is it justified. It also onsiders guidance using good engineering udgement. SCGs are divided into the categories of chemical-specific (e.g., groundwater standards), action-specific (e.g., design of a landfill), and location-specific (e.g., protection of wetlands).

The key SCGs associated with this site are the requirements of the Resource Conservation and Recovery Act (RCRA) Regulations including land disposal restrictions, the 6NYCRR Part 360 requirements for landfill closure, ambient air standards, surface water quality standards, and groundwater standards.

If the implementation of a remedy results in one or more SCGs not being met, a waiver of the SCG must be justifiable based upon any one of the reasons specified in 6NYCRR Part 375.

2. Overall Protection of Human Health and the Environment

This criterion describes how the alternative, as a whole, achieves and maintains protection of human health and the environment. This is based upon a composite of factors assessed under other criteria, especially short/long-term effectiveness and compliance with SCGs.

3. Short-term Impacts and Effectiveness

This criterion evaluates the effectiveness of alternatives in protecting human health and the environment during construction and inplementation of a remedy until response objectives have been met.

4. Lona-term Effectiveness and Permanence

This criterion evaluates the long-term effectiveness of alternatives in maintaining protection of human health and the environment after objectives have been met.

5. Reduction of Toxicitv, Mobilitv, and Volume

This criterion evaluates the anticipated performance of the specific treatment technologies an alternative may employ.

Department policy is to give preference to alternatives that permanently and significantly reduce the toxicity, mobility, and volume of the wastes at the site. This includes assessing the fate of the residues generated from treating the wastes at the site.

6. Implementablity

The technical and administrative

feasibility of implementing the alternative is evaluated, along with the availability of required goods and services.

7. Cost

Capital and operation and maintenance costs are estimated for thealternatives and compared on a present worth basis. Although cost is the last criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, lower cost can be used as the basis for final selection.

Using the above criteria, the Department found the following to be true:

Alternative 1, No Action, does not include actions to reduce existing contaminant exposure risks. Alternative No. 1 would not meet any Standards, Guidance or Criteria (SCGs) and would not provide for overall protection of human health and the environment in the long term. There is no justification for waiving all SCGs.

Alternative 2A, a 6NYCRR Part 360 cap over the landfill with no hydrologic controls. The mobility of the waste and direct contact with the waste would be reduced. The volume of waste would not be affected. Groundwater would not be addressed. All SCGs for the site would not be achieved. This alternative would provide overall protection of human health but may not be protective of the environment in the long term. This alternative is readily implementable and would have minimal short term impacts.

Alternative 2B is a 6NYCRR Part 360 cap over the entire site with a slurry wall and two containment wells. The mobility of the waste and direct contact with the waste would be reduced. The volume of waste would not be affected. Groundwater contamination would be addressed. All SCGs for the site would be achieved. This alternative would be protective of human health and the environment. The engineering difficulty of installing a slurry wall to a depth of 70 feet below the ground surface and the weathered bedrock may make it difficult to form a continuous hydraulic barrier between the bedrock and the slurry wall. The average depth of the slurry wall is thirty feet, with approximately 10% of the slurry wall approaching 70 feet in depth. This alternative is readily implementable although slightly less than alternative 2A because of the slurry wall. The pumping of groundwater from inside the cell is expected to be necessary for the 30 year period. Alternative 2B would have minimal short term impacts.

Alternative 2C is a 6NYCRR Part 360 cap over the entire site with hydrologic controls via trenches and two containment wells. The mobility of the waste and direct contact with the waste would be reduced. The volume of waste would not be affected. Groundwater contamination would be addressed. All SCGs for the site would be achieved. Alternative 2C would provide overall protection of human health and the environment in the long term. This alternative is readily implementable and would have minimal short term impacts.

Alternative 2D is a 6NYCRR Part 360 cap over the entire site with hydrologic controls via upgradient groundwater diversion using a slurry wall and french drain and a downgradient trench to collect leachate. The mobility of the waste and direct contact with the waste would be reduced. The volume of waste would not be affected. Groundwater contamination would be addressed. All SCGs for the site would be achieved. Alternative 2D would provide overall protection of human health and the environment in the long term. This alternative is readily implementable and would have minimal short term impacts.

Alternative 3 is excavation of the fill with on-site Solidification/Stabilization. This alternative will significantly reduce the volume and toxicity of the soils on-site and the mobility of the contaminants associated with the soils will be significantly reduced. This alternative would comply with SCGs except those where waivers were justified. It would provide overall protection of human health and the environment in the long term. Alternative 3 would be very difficult to implement in a residential setting. This is due to the the close proximity of homes, large quantities of waste to be stabilized and the high groundwater table. Short term impacts would be minimized by performing the work in an enclosure.

The alternatives are evaluated in detail in Sections 3 and 4 of the FS Report.

C . Selection of the Preferred Alternative:

The selected alternative must result in a remedy which is both protective of health

and the environment and feasible, recognizing the unique conditions associated with the Taylor's Lane site.

Four of the six alternatives presented in the FS Report comply with all SCGs. They are Alternatives 28, 2C, 2D and 3. Alternative 3 would significantly reduce the toxicity and mobility of wastes and would justify the waiver of groundwater standards. Alternatives 1 would not meet all SCGs. Alternative 2A would meet SCGs if groundwater downgradient of the site shows no contamination.

Since people do not use the groundwater, the principal threat to human health is on-site soil contamination. Since both soil and groundwater contamination are threats to Magid Pond and Otter Creek, only alternatives 2B through 3 are protective of human health and the environment. A contingent remedy would provide a protective remedy and would allow design to proceed concurrent with groundwater monitoring. Alternative 1 is not protective of human health and the environment. Alternatives 2B through 3 are each equally protective of human health and the environment and equally attain SCGs and thereby meet the threshold criteria established by the NCP. Alternative 1 does not. Alternative 2A, with a contingency for groundwater treatment if pesticides and/or arsenic, cadmium, copper, lead, mercury and zinc are shown to be migrating off-site in quantities detrimental to Magid Pond and Otter Creek, would be protective of human health and the environment. Alternative 2A would attain the same level of compliance with groundwater standards as alternatives 2B, 2C or 2D if monitoring shows no detrimental migration of contaminants to Magid Pond. Alternatives 2A, 2B, 2C and 2D have less short-term impacts and would be easier to implement than Alternative 3 since there would be no excavation (therefore less potential for short-term exposures) for alternative 2. Alternative 3 has greater long-term permanence and greater reduction of toxicity and volume than Alternatives 2A, 2B, 2C or 2D. Alternative 2B is lower in total present worth than alternatives 2C, 2D and 3 and equally protective of human health and the environment in the long term. While alternative 1 has the lowest present worth, it is not protective of human health and the environment.

VII. HIGHLIGHTS OF COMMUNITY PARTICIPATION

Residents and landowners have shown interest in this project during the remedial process. Public meetings and other events have been held to update the the community on remedial activities, as summarized in the following chronolgy:

February 27, 1989: Public meeting concerning the RI/FS work plan.

August 10, 1992: Public comment period on the Remedial Investigation (RI) results.

September 30, 1993: Public meeting to present the PRAP.

A Citizen Participation (CP) Plan was developed and implemented by the Village of Mamaroneck with oversight and participation by the NYSDEC. All major reports were placed in the document repositories in the vicinity of the site and made available to the public for review. A public contact list was developed and used to distribute meeting annoucements.

Inquiries and comments (written and verbal) were received and responded to throughout the course of the project. Comments received regarding the PRAP have been addressed and are documented in the Responsiveness Summary (Appendix B)

11. Summary of the Government's Remedy

The State's remedial action is Alternative 2A with a contingency to select Alternative 2B if pesticides and/or arsenic, cadmium, copper, lead, mercury and zinc are traveling off-site in the groundwater in quantities detrimental to Magid Pond and Otter Creek.

Alternative 2A consists of deed restrictions and the following activities: a 6NYCRR Part 360 cap (gas venting layer, a low permeability barrier layer, a barrier protection layer, topsoil) at a cost of $1,573,000. The contingency, Alternative 2B, includes everything in Alternative 2A plus a slurry wall and two pumping wells for groundwater containment at an additional cost of $1,005,000.; a groundwater treatment system at a cost of $391,000. The total capital cost of Alternative 2A is $2,816,000. If the contingent remedy, Alternative 2B, is necessary the capital cost will be $4,688,000. The total operation and maintanance (O& M) for Alternative 2A is

$41,000 annually, and Alternative 2B is $172,000 per year. The total Present Worth cost for this Alternative 2A is $3,446,000 and the total Present Worth cost of Alternative 2B is $7,332,000.

The alternative chosen will use institutional controls, including, but not limited to, filing of the Record of Decision with the Westchester County Clerk, and notification to, and approval by, the Department of any physical alteration or construction constituting a substantial change of the use of the site. This notification must meet the requirements set forth is 6 NYCRR Part 375-1.6.

There will be air monitoring of the gas vents. The gas vents will be designed so that they can be retrofitted for treatment, if necessary.

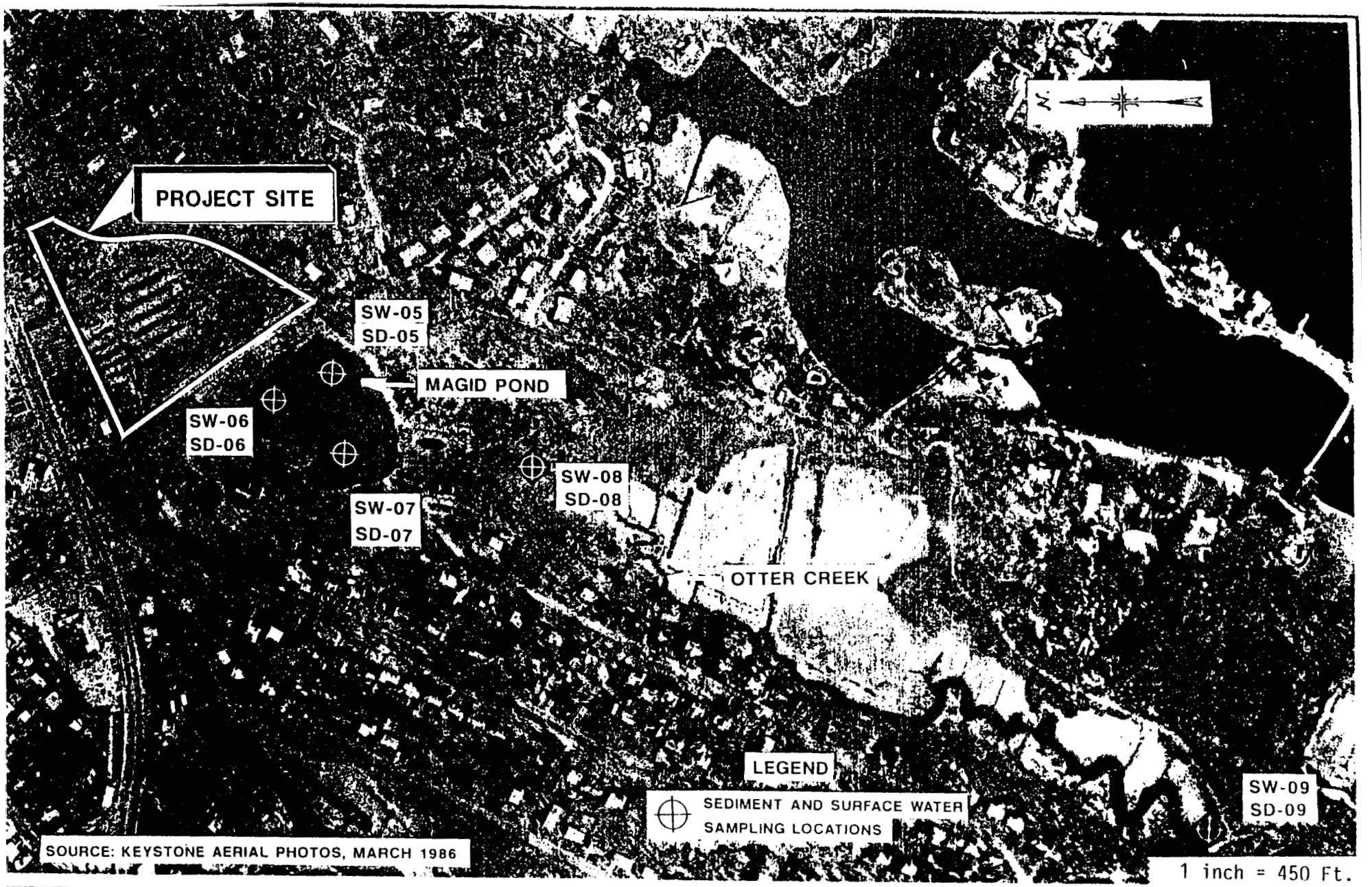
Alternative 2A with the contingency, when implemented, will prevent human exposure to contaminated soils, will protect the environment from migration of contaminants and will be effective in the long term. The actions can be implemented with common construction practices and costs are appropriate based upon the costs associated with similar 6NYCRR Part 360 caps and groundwater collection and treatment systems. Other alternatives or combinations may meet the criteria set-forth, but the recommended alternative is thought to be the most effective and economical.

VIII. Determining if the Contingent Remedy is Necessary

The contingent remedy will be implemented if the groundwater monitoring wells on the west side of Taylor's Lane have pesticides, arsenic, cadmium, copper, lead, mercury or zinc migrating in detrimental quantities off-site toward Magid Pond and Otter Creek. The monitoring will be conducted immediately after the installation of the wells and biannually for the first five years thereafter. The compounds anaylzed will be the Target Compound List volatile organic compounds, pesticides arsenic, cadmium, copper, lead, mercury and zinc unless determined otherwise by the Department. The volatile organic compounds will be used as an indication of contaminant movement in the groundwater. Subsequent monitoring may vary based on the first five year monitoring results.

IX. Proposed Remediation Schedule

Record of Decision:	November, 1993
Design Submission:	August, 1994
Construction Start:	October, 1994
Construction Completion:	December, 1995



MALCOLM PIRNIE

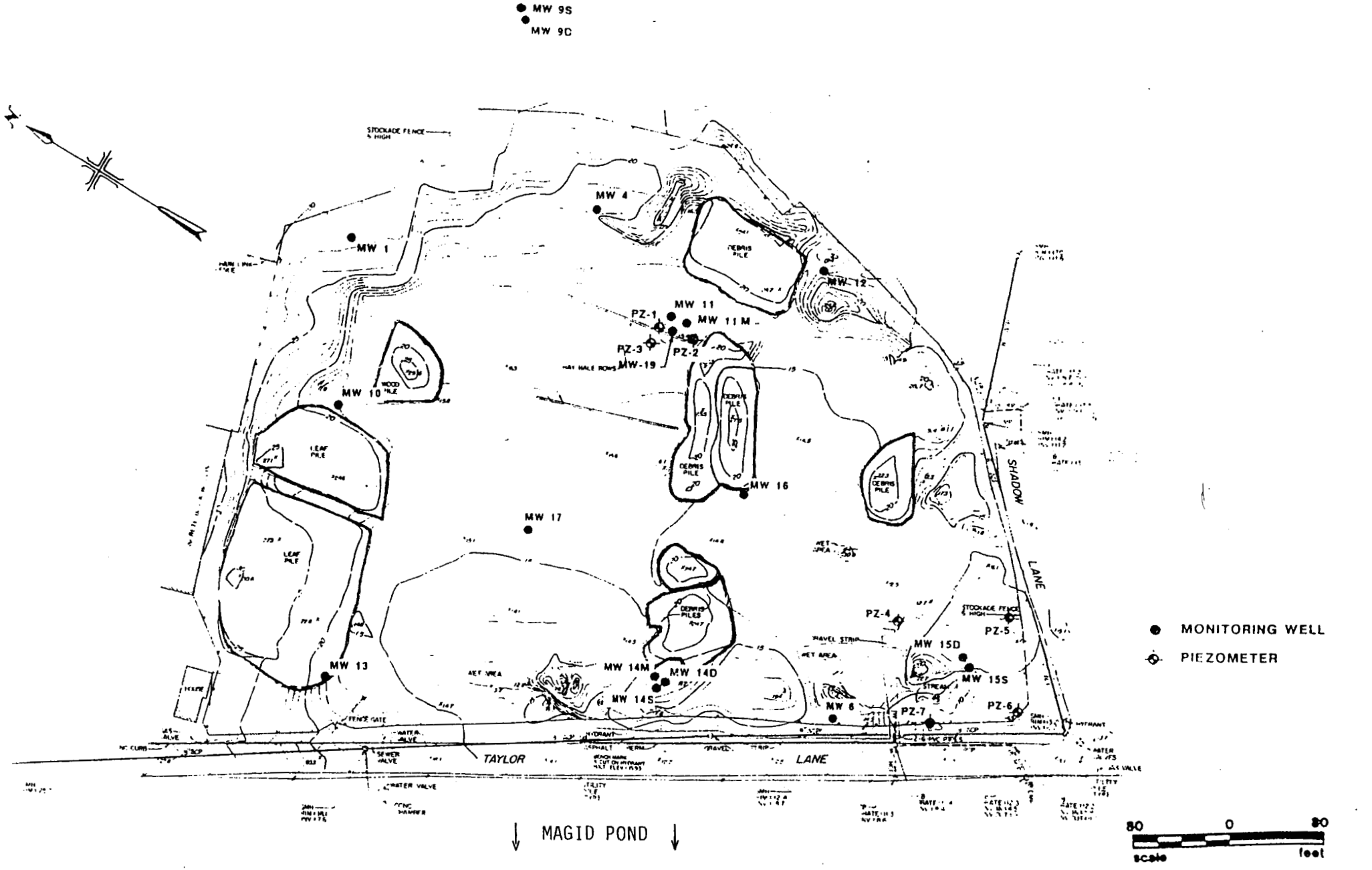
VILLAGE OF MAMARONECK, NEW YOHK

MAMARONECK TAYLORS LANE LEAF COMPOSITE SITE

SAMPLING LOCATIONS

MALCOLM PIRNIE INC.

FIGURE 2-2



VILLAGE OF MAMARONECK, NEW YORK

MAMARONECK TAYLOR LANE LEAF COMPOST SITE

MONITORING WELL AND PIEZOMETER SITE LOCATION MAP

MALCOLM PIRNIE, INC.

FIGURE 1-1

APPENDIX A
ADMINISTRATIVE RECORD
Mamaroneck Taylor's Lane Compost
Inactive Hazardous Waste Site No. 360021

A. Court Orders:

1. Order on Consent Between the New York State Department of Environmental Conservation and the Village of Mamaroneck, Index No. W-3-0309-89-05, dated August 14, 1989

B. Reports and Workplans:

1. "Mamaroneck Taylor's Lane Leaf Compost Site Remedial Investigation/Feasibility Study Work Plan" prepared by Malcolm Pirnie, Inc., dated April, 1990

2. "Mamaroneck Taylor Lane Leaf Compost Site Remedial Investigation Report Volume I" with Appendices, prepared by Malcolm Pirnie, Inc., dated June, 1992

3. "Mamaroneck Taylor Lane Leaf Compost Site Final Supplemental Remedial Investigation Report, Volume 2" prepared by Malcolm Pirnie, Inc., dated September, 1992

4. "Mamaroneck Taylor Lane Leaf Compost Site Final Feasibility Study" prepared by Malcolm Pirnie, Inc., dated April, 1993

5. "Proposed Remedial Action Plan, Mamaroneck Taylor's Lane Compost Site, Westchester County, New York ID No. 360021" prepared by New York State Department of Environmental Conservation, dated September, 1993

C. Correspondence:

1. Letter dated February 26, 1990 from G. Burke (NYSDEC) to J. Fraioli (V. of Mamaroneck) Re: Approval of Work Plan

2. Letter dated November 26, 1991 from D. Cohen (Malcolm Pirnie, Inc.) to G. Burke (NYSDEC) Re: Supplemental Remedial Investigation Scope of Work

3. Letter dated May 4, 1992 from G. Burke (NYSDEC) to A. Russo (Malcolm Pirnie, Inc.) Re: Approval of Remedial Investigation Report Volume 1

4. Public Notice of Public Meeting dated September 2, 1993 Re: New York State Proposed Remedial Action Plan

5. Public Notice, dated October 6, 1993 Re: Extension of Public Comment Period on the Proposed Remedial Action Plan

6. Letter dated November 16,1993 from G. Burke (NYSDEC) to M. Galligan (V. of Mamaroneck) Re: Approval of Supplemental Remedial Investigation Report Volume 2 and Approval of Feasibility Study

7. Transcript of the September 30, 1993 Public Meeting at Mamaroneck Village Hall

APPENDIX B
RESPONSIVENESS SUMMARY

Mamaroneck Taylor's Lane Compost Site (360021)

INTRODUCTION:

The issues and questions addressed in the following Responsiveness Summary were raised during a public meeting held by the New York State Department of Environmental Conservation (NYSDEC) on September 30, 1993 at the Village of Mamaroneck Village Hall and letters received during a seven week comment period. The purpose of the meeting was to discuss the results of the Remedial Investigation/Feasibility Study (RI/FS) of the Mamaroneck Taylor's Lane Compost Inactive Hazardous Waste Site (8360021) and receive comments on NYSDEC's Proposed Remadial Action Plan (PRAP) for the site. Representatives of the NYSDEC, The New York State Department of Health (NYSDOH), and the Village of Mamaroneck and the Village's consultants were present at the meeting.

The following individuals submitted written comments regarding the proposed remedy:

Mr. L. Slater	Mr. L. Zaratone
Mr. R. Blumberg	Mr. & Ms. N. & J. Powell
Ms. C. Kennan	Mr. & Ms. T. & E. Murphy
Mr. B. Golub	

QUESTIONS AND RESPONSES:

Q: We would like a time extension on the 30 day comment period.

A: The comment period was extended an extra 21 days and ran from September 3, 1993 to October 29, 1993.

Q: Will the entire seven acres be capped?

A: There will be a portion of the site along Greenhaven road which will not be capped. It is currently estimated that six of the seven acres will be capped.

Q: Will the cap extend onto neighboring properties?

A: Based on information to date, the cap will not extend onto neighboring properties.

Q: What is the site's appearance going to be upon completion of the remediation?
Will all trees be cut down?
Will the appearance of the site improve?
The fence is in a constant state of disrepair, is an eyesore and should be replaced. Also, beautification should be performed around the site.

A: As many trees as possible will be saved. However, all trees within and immediately adjacent to the area to be cappedmust be removed. The actual capped area will have vegetation (i.e. grass). The site will be elevated approximately five feet higher than it is now and will be gently sloped to promote drainage. Visual improvement will occur since the site will be capped. The fence surrounding the site will be repaired or replaced and permanent fence posts will replace temporary supports.

Q: Is there a deadline as to when the design choice (Record of Decision) must be completed?

A: There is no mandate for the Record of Decision (ROD) to be signed by the DEC after the public comment period ends, however the ROD is usually signed within one to two months after the completion of the public comment period.

Q: How long will the synthetic liner material last?

A: Studies have estimated, for a properly maintained geosynthetic liner, a possible life of greater than 100 years.

Q: Will the deed restrictions end after thirty years?

A: The deed restrictions will be permanent.

Q: What will be done to prevent the water which enters the site by groundwater from ponding in the land (i.e. resident's yards) upgradient of the site?

A: Diversion of groundwater will be incorporated into the Design if it is necessary.

Q: Would it be possible to provide a conduit for a subsurface stream to pass through the fill?

A: It is not practical to install a conduit through the fill mass. To install this pipe, the fill would need to be dewatered, the water would need to be treated, the waste would need to be excavated and the pipe would need to be installed. If the waste is excavated, there is the possibility for contamination release to the air. Also, if the installed pipe fails, there could also be a release of contamination into the wetland. Therefore it is not recommended.

Q: Surface drainage from this site will have significant volume. What is the plan for all this water?
Im concerned that the cap will change the drainage pattern of the neighborhood. How will drainage be affected by the cap?

A: Drainage controls for surface run-off will be included in Design. Both upgradient surface water run-on and run-off will be diverted around the site to prevent any ponding due to the presence of the cap. There will be some rainwater storage capacity in the two feet of soils above the synthetic liner of the cap. Stormwater discharge will be handled in accordance with New York State guidelines.

Q: The trees aren't in the waste. If the trees are in the waste, wouldn't the trees be dead?

A: Some trees may be in the waste and not be dead. If the waste was toxic to trees, then the trees would be affected by the waste.

Q: Can trees be planted that won't penetrate the cap?

A: Trees can be planted in areas where there is no cap, such as a buffer zone at the property boundary.

Q: If you move waste around, why don't you just get rid of it?

A: A small amount of wastes will be regraded. This will be done on the surface of the waste mass. The cost to remove wastes from this site and the environmental controls to protect the residents in the area, make this option extremely expensive with significant short-term risks and not feasible.

Q: Was the proposed remedy advanced by the Village of Mamaroneck?

A: No. The remedy was selected by the DEC.

Q: Has the Village been involved with the selection of the remedy?

A: The Village and its consultant had recommended an alternative in the Feasibility Study which the State had reviewed and concluded was the preferred remedy. Based on public comment, the State has now selected this alternative as the final remedy for the site.

Q: Who will monitor the site after construction is complete? Who will ensure that the monitoring work is completed?

A: The responsibility for performing the monitoring is the Village's. The monitoring results will be forwarded to the DEC. The DEC and the Department of Health will evaluate the monitoring results to determine the effectiveness of the remedy and assess the need for any modifications to the remedy or the monitoring program.

Q: Is there a law restricting future use at the site?

A: The DEC regulations stress that only uses of the site which will not compromise the remdial action will be allowed on-site.

Q: Do we, the village residents, have input into what future use the site will have after the cap is completed?
We request the DEC prepare a document listing allowable future uses for this site,
The site should not be developed.

A: The DEC will only review proposed uses which are submitted to the DEC. The DEC will not allow any post remedial action activities which would compromise the remedial action.
The DEC does not give recommendations to future use of hazardous waste sites. The DEC reviews proposals for future use to determine if the use would compromise the remedial action. The input of residents should be directed to the Village for consideration.

Q: The Town of Rye may be the owner of the Taylor's Lane property.

A: If the Town of Rye is owner of this property, it is the obligation of the Village under the Consent Order to initiate contact with the Town of Rye,

Q: How long did the site receive hazardous waste?

A: The length of time which the site received hazardous waste is unknown.

Q: What percentage of the waste is contaminated?

A: There are hazardous waste contaminants disbursed throughout the waste. How much of the waste is contaminated cannot be expressed as a percentage based on the information collected to date.

Q: How many holes were drilled through the waste mass?
If more holes were placed in the site, would it be possible to find an area that could be removed?

A: There were 44 trenches, 19 soil borings and 15 monitoring well borings made through the waste. From the data that has been gathered, no highly contaminated area was identified which would be feasible and beneficial to remove.

Q: Did the worst contamination come from the drums?

A: It would be speculation as to how the worst contamination was placed at the site.

Q: Would a magnetometer survey uncover drums?

A: A magnetometer survey, which was conducted at this site, was not conclusive. With the high water table and the presense of construction and demolition debris at the site, the magnetometer survey did not identify a nest of drums.

Q: Why are drinking water standards used as a basis of comparison for the groundwater under this site, since nobody is using this water as a drinking water supply?

A: Groundwater standards are used as a basis for comparison because it is the goal of the DEC to remediate the site to pre-contaminated conditions. Groundwater standards are established to protect groundwaters as a source of potable water supply. If groundwater standards are met, the natural resources at the site are restored to a reusable condition.

Q: Was air sampling conducted off-site?

A: No. Air sampling was conducted duringthe remedial activities on-site. Since there were no detected elevated levels of air contamination within the site, there would not be contamination off-site.

Q: How long before the site is remediated?

A: The project will be totally complete in approximately two and one-half years.

Q: I'm afraid that the construction will cause me to get ill.

A: There will be a health and safety plan required of the construction contractor which will have safeguards to protect the community. This plan must be acceptable to the NYSDOH and will require the work to stop if there is a threat to the residents or the workers.

Q: Will there be any health hazards to residents from the remedial construction?

A: During construction there will be air monitoring and air contaminant action levels which will be established prior to construction that will ensure the safety of the community.

Q: Will there be someone, independent of the construction company, monitoring the remedial activity?

A: Yes.

Q: If the contaminants are moving in the fill, why not do the contingent remedy?

A: To date, there has not been significant migration during twenty years since the operation ceased. Without measureable contaminant migration occurring, the DEC would not force the Village to commit its financial resources to alleviate a problem which does not exist at this time.

Q: If the contingent remedy is required in the future, will NYS funding be available?

A: Funding for the contigent remedy would be available if the 1986 Environmnetal Quality Bond Act of 1986 monies has not been depleted. Based on current projections, these funds are expected to be depleted by the late 1990s.

Q: How will the gases in the fill migrate to the vents?

A: There will be a gas venting layer below the impermeable cap which will allow the gases to flow beneath the liner to the vents. This is a proven technology.

Q Does the statement,"Groundwater beneath the site has very low levels of pesticides and VOCs," reflect actual sampling results?

A: Yes.

Q: Does groundwater direct contamination toward residences in the area.

A: Groundwater contours (relative elevations) demonstrate that all groundwater from this site travels toward Magid Pond and Otter Creek.

Q: Please prepare a bar gragh showing respective contaminants and comparing them to New York State safety standards.

A: Comparisons have been made in the RI/FS reports which compare contaminants to standards where standards exist.