Department of Environmental Conservation

Division of Environmental Remediation

Environmental Restoration
Record of Decision
Former APCO Property
Operable Unit #2 - Artuso Property
Rochester (C), Monroe County
Site Number B-00001-8

March 2000

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* JOHN P. CAHILL, *Commissioner*

DECLARATION STATEMENT
ENVIRONMENTAL RESTORATION RECORD OF DECISION

Former APCO Property, Operable Unit #2- Environmental Restoration Site
City of Rochester, Monroe County, New York
Site No. B-00001-8

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Former APCO Property, Operable Unit #2 environmental restoration site which was chosen in accordance with the New York State Environmental Conservation Law.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Former APCO Property, Operable Unit #2 environmental restoration site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

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

Description of Selected Remedy

Based on the results of the Site Investigation/Remedial Alternatives Report (SI/RAR) for the Former APCO Property, Operable Unit #2 and the criteria identified for evaluation of alternatives, the NYSDEC has selected excavation and on-site treatment of petroleum contaminated soil and collection of light nonaqueous phase liquid (LNAPL) in groundwater. The components of the remedy are as follows:

- Pre-design investigation to delineate the extent of LNAPL;
- Excavation and ex-situ treatment of petroleum contaminated soils; and
- Collection and off-site disposal of LNAPL in groundwater.

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.

3/30/2000
Date

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

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RECORD OF DECISION

Former APCO Property
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SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health, has selected this remedy to address the threat to human health and/or the environment created by the presence of hazardous substances at the former Artuso property, which is Operable Unit #2 of the Former APCO Property brownfield project.

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

The former Artuso property is immediately adjacent to the former APCO property and it is located at 1126 Atlantic Avenue in the City of Rochester, New York. As more fully described in Sections 3 and 4 of this document, operations from a general contracting business have resulted in the disposal of a number of hazardous substances, including petroleum products, at the site. These disposal activities have resulted in the following threats to the public health and/or the environment:

- a threat to human health associated with petroleum products via direct contact or ingestion of on-site soils.
- an environmental threat to groundwater associated with petroleum products exceeding standards.

In order to eliminate or mitigate the threats to the public health and/or the environment that the hazardous substances at the former Artuso property brownfield site have caused, the following remedy was selected to allow for recreational and/or residential use of the site:

- Excavation and on-site treatment of petroleum-contaminated soils. Soils from operable unit #2 would be treated using ex-situ biological treatment along with petroleum contaminated soils from operable unit #1.

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

SECTION 2: SITE LOCATION AND DESCRIPTION

Operable Unit #2 of the Former APCO site (former Artuso property) is the subject of this ROD. The site consists of a 1.06-acre parcel located on 1126 Atlantic Avenue and is immediately adjacent to the APCO site. The site is located in a densely populated residential area on the eastern side of the City of Rochester in Monroe County. Residential properties bound the Artuso property to the north and east. Area residences are served by public water and sewers, and most homes have basements. Please refer to *Figures 1 & 2* for the general site location.

An operable unit represents a portion of the site remedy which for administrative reasons is addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination. The other operable unit for this site is described in Section 3.2 below.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The former Artuso property was owned and operated as a road and driveway construction company by Michael Artuso. Primary business activities on-site were equipment storage and maintenance. The Mr. Artuso's residence was also located on-site. There were five known aboveground storage tanks used for diesel fuel, gasoline, waste oil and lubrication oil and two underground storage tanks for heating oil and fuel. On-site buildings included the Artuso's home and a maintenance shop. There were also various piles of debris and asphalt millings scattered throughout the property.

The City initiated condemnation proceedings against Mr. Artuso in 1998 and took title to the property on October 12, 1998. Please refer to *Figure 2* for a general site layout.

3.2: Environmental Restoration History

The following activities were completed by the City of Rochester on the former Artuso property: demolition of both buildings, removal of all aboveground storage tanks (ASTs) and waste oil drums, and verification that all underground storage tanks (USTs) were removed. The remaining environmental concerns at the former Artuso property will be addressed by this ROD.

The former APCO property (Operable Unit #1) is immediately adjacent to the former Artuso property. Operable Unit #1 includes a construction and demolition debris landfill and various underground and aboveground storage tanks. Please refer to the Record of Decision for Operable Unit #1 (July 1998) for more details. It is intended to proceed with simultaneous

remedial construction at both the former APCO and Artuso properties. A general site layout of both operable units is presented in *Figures 1 & 2.*

In July 1998, a ROD was signed by the NYSDEC for the former APCO Property. The selected remedy included:

- A design-phase investigation to delineate the extent of soil removal required and to determine the extent of groundwater contamination;
- Removal of all ASTs and USTs;
- Construction of an ex-situ soil treatment system to address on-site and off-site petroleum contaminated soil in the northern UST and southern UST areas;
- Construction of a groundwater collection and treatment system to address both on-site and off-site groundwater contamination;
- An asbestos survey of existing buildings and asbestos abatement as necessary;
- Demolition of all existing structures on-site with off-site disposal of construction and demolition (C&D) debris; and
- Excavation and off-site disposal of all C&D debris, solid waste, and visually stained soils on-site.

The following activities have been completed to date at the former APCO property under the first phase of remedial construction:

- Demolition of all buildings and off-site disposal of C&D debris;
- Removal of all USTs and ASTs;
- Excavation and off-site disposal of grossly contaminated soils around the USTs; and
- Clearing and grubbing of the fenceline with installation of a new fence with locking gates.

The design phase investigation work plan is currently under review and is expected to be implemented in the Spring of 2000.

SECTION 4: SITE CONTAMINATION

To define the nature and extent of any contamination by hazardous substances of this environmental restoration site, the City of Rochester completed a Phase II Investigation of the former Artuso Property.

4.1: Summary of the Site Investigation

To define the nature and extent of contamination, the City funded a supplemental investigation at the former Artuso property. A report entitled Phase II Environmental Site Investigation Report, 1126 Atlantic Avenue, Rochester, New York, May 1999 was prepared and describes the field activities and findings of this investigation in detail.

The Phase II investigation at the former Artuso property included the following activities:

- *Installation of three monitoring wells at the former Artuso property for analysis of groundwater as well as hydrogeologic conditions;*
- *Sampling of a groundwater monitoring well on the former APCO property and three monitoring wells on the former Artuso property to characterize groundwater quality and flow direction;*
- *Review of soil boring and groundwater data from the former APCO property SI/RAR Report; and*
- *Excavation of 24 test pits at the former Artuso property to visually and chemically characterize subsurface soils.*

Data from the SI/RAR for the former APCO property are available in the Site Investigation/Remedial Action Report, Former APCO Property, 79 Woodstock Road, Rochester, New York, January 1998. This report is located in the document repositories.

To determine which media (soil, groundwater, etc.) are contaminated at levels of concern at the former Artuso property, the Phase II investigation analytical data were compared to environmental Standards, Criteria, and Guidance values (SCGs). Groundwater, drinking water and surface water SCGs identified for the former Artuso property are based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part 5 of New York State Sanitary Code. For soils, NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 provides soil cleanup guidelines for the protection of groundwater, background conditions and health-based exposure scenarios. In addition, for soils, background concentration levels can be considered for certain categories of contaminants. Guidance values for evaluating contamination in surface water sediments are provided by the NYSDEC Technical Guidance for Screening Contaminated Sediments.

Based on the phase II investigation results in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized below and in *Table 1*. More complete information can be found in the Phase II Investigation report and SI/RAR report for the former APCO property.

Chemical concentrations in *Table 1* are reported in parts per billion (ppb) and parts per million (ppm). For comparison purposes, where applicable, SCGs are provided for the medium of concern.

4.1.1: Site Geology and Hydrogeology

The overburden at the former APCO property consists mainly of lacustrine sediments over water-sorted ablation and subglacial lodgement tills. The depth to bedrock ranges from 5 to 22 feet below ground surface and the bedrock consists of Rochester shale and DeCew dolomite formations. Groundwater elevations are six to eight feet below ground surface.

4.1.2: Nature of Contamination

As described in the phase II investigation report, soil and groundwater samples were collected to characterize the nature and extent of contamination. The investigation identified petroleum products as the contaminants of concern in soils. The specific contaminants associated with petroleum products are: PAHs (polycyclic aromatic hydrocarbons), benzene, toluene, xylene, and petroleum hydrocarbons. Benzene, toluene, and xylene are volatile organic compounds (VOCs) commonly found in gasoline and diesel fuels. PAHs are considered semi-volatile organic compounds (SVOCs) that contain multiple benzene rings in their chemical structure. These chemicals are typically found in petroleum products, coal tar, and may also be present as by-products of incomplete combustion.

4.1.3: Extent of Contamination

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

Soil

A test pit exploration program was completed at the site in March 1999. The program involved excavation of 24 test pits and laboratory analyses of selected soil samples. Soils were characterized by visual and olfactory appearance, and screened with a photoionization detector (PID). Based upon the PID screening and visual observations, a total of 7 samples were selected for laboratory analyses. Samples were analyzed for VOCs, SVOCs and metals. The results are presented in *Table 1*.

Sample results indicated that soils were contaminated with VOC and SVOCs associated with petroleum products. Diesel fuel was detected in one sample at approximately 0.4 %.

Groundwater

Three monitoring wells were installed on-site during the site investigation conducted in March 1999. These wells were sampled and groundwater was analyzed for VOCs, SVOCs, PCBs, pesticides, and 8 metals. Barium was the only contaminant detected in groundwater at levels ranging from 58 to 65 parts per billion (ppb). The groundwater standard for barium is 1,000 ppb. Please refer to *Figure 3* for well locations and groundwater flow direction.

In addition to the three on-site wells, one well on the former APCO property was sampled and analyzed for total petroleum hydrocarbons and PCBs. There was light phase non-aqueous phase liquid (LNAPL) detected in this well (MW-3A). LNAPL is a liquid mixture of several chemicals that does not easily mix with water and floats on the top of the water table. A

common example of LNAPL is oil and water. Sample results of the LNAPL indicated it was a heavy lube oil that did not contain PCBs. This well is in close proximity to the former Artuso site; however, it is upgradient of the site. Due to the similar site history and nature of contamination at both the APCO and Artuso properties, it cannot be determined if the source of LNAPL is on the former Artuso property or the former APCO property.

4.2: 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 6.0 of the SI/RAR report for the former APCO property.

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 exist at the site include:

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

It is expected that this property will be developed for unrestricted residential or recreational use. Therefore, remediation will be required to mitigate the known and potential future exposure pathways.

4.3: Summary of Environmental Exposure Pathways:

This section summarizes the types of environmental exposures which may be presented by the site. Groundwater is the primary route of migration for contaminants off-site and no significant environmental resources (i.e., creeks, wetlands, habitats) were identified on-site. Please refer to section 3.8 of the SI/RAR report for the former APCO property. There are no identified environmental resources within 1/4 mile of this site, and there are no known environmental exposure pathways.

SECTION 5: ENFORCEMENT STATUS

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

The Potential Responsible Parties (PRP) for the site, documented to date, include only the previous property owner, Mr. Michael Artuso. The PRPs are subject to legal actions by the State for recovery of all response costs the State has incurred. The City of Rochester will assist the State in their efforts by providing all information to the State which identifies PRPs. The City of Rochester will also not enter into any agreement regarding remedial response costs without the approval of the NYSDEC.

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

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

The proposed future use for the former Artuso property (Former APCO Property, Operable Unit #2) would be recreational or residential.

The goals selected for this site are:

- *Reduce, control, or eliminate to the extent practicable the contamination present within the soils;*
- *Eliminate the potential for direct human or animal contact with the contaminated soils on-site;*
- *Mitigate the impacts of contaminated groundwater to the environment; and*
- *Provide for attainment of SCGs for groundwater quality at the limits of the area of concern (AOC), to the extent practicable.*

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy must be protective of human health and the environment, be cost effective and comply with other statutory requirements. Potential remedial alternatives for the Artuso Property were identified, screened and evaluated. The remedial alternatives were limited to those that were evaluated in the Remedial Alternatives Report for operable unit #1, the Former APCO Property. This evaluation is presented in the report entitled Site Investigation/Remedial Action Report, Former APCO Property, 79 Woodstock Road, Rochester, New York, January 1998, and the SI/RAR Addendum Report, February 1998.

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

7.1: Description of Remedial Alternatives

The potential remedies are intended to address the contaminated soils at the site and the limited area of LNAPL detected in groundwater on the former APCO Property.

Alternative #1 - No Action

Present Worth:	$ 0
Capital Cost:	$ 0
Annual O&M:	$ 0
Time to Implement:	Immediate

The no action alternative is typically evaluated as a procedural requirement and as a basis for comparison. This alternative would leave the site in its present condition and would not provide any additional protection to human health or the environment.

Alternative #2 - Institutional Controls

Present Worth:	$51,600
Capital Cost:	$0
Annual O&M:	$4,200
Time to Implement:	<6 months

This alternative would include a restriction of on-site land usage and groundwater usage through deed restrictions. These controls would also include development of a soil management plan and erection of additional fencing. Long-term groundwater monitoring would be implemented to monitor the migration of groundwater contamination.

Alternative #3 - Excavation and Off-site Disposal of Contaminated Soils with LNAPL Product Recovery

Present Worth:	$193,000
Capital Cost:	$150,000
Annual O&M:	$10,500
Time to Implement:	6 months to 1 year

This alternative would consist of excavation and off-site disposal of approximately 525 cubic yards of contaminated soils. All petroleum-contaminated and visually stained soils would be excavated and disposed of off-site. Excavation of these soils would address VOC and SVOC contamination. Upon final site grading, verification samples would be taken to confirm cleanup. A recovery system would be installed to remove LNAPL product identified in well MW-3A on the former APCO property. Recovered LNAPL would be disposed of off-site. A design-phase investigation would be conducted to refine the estimated extent of soil contamination and determine the extent of LNAPL.

Alternative #4 - Excavation and On-site Treatment of Contaminated Soils with Recovery of LNAPL product

Present Worth:	$175,000
Capital Cost:	$131,450
Annual O&M:	$10,500
Time to Implement:	6 months to 1 year

This alternative would involve excavation and on-site treatment of 525 cubic yards of petroleum-contaminated and visually stained soils. Soils would be excavated for ex-situ treatment with petroleum-contaminated soils from the former APCO property. Treated soils would be used on-site as backfill. Excavation of theses soils would address VOC and SVOC contamination. Upon final site grading, verification samples would be taken to confirm cleanup. A recovery system would be installed to remove LNAPL product identified in well MW-3A on the former APCO property. Recovered LNAPL would be disposed of off-site. A design-phase investigation would be conducted to refine the estimated extent of soil contamination and determine the extent of LNAPL.

7.2 Evaluation of Remedial Alternatives

The criteria used to compare the potential remedial alternatives are defined in the regulation that directs the remediation of environmental restoration project sites in New York State (6 NYCCR 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 included in the APCO Remedial Alternatives Report.

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

1. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance.

The most significant SCGs identified at the site are the NYS Part 703 Groundwater Standards and TAGM 4046. The background concentration for PAHs in soil identified in the ROD for operable unit #1 was 5 ppm total PAHs. This is a conservative estimate based upon 5 background samples obtained in the surrounding neighborhood. These background results are presented in *Table 2*.

Alternatives 1 and 2 would not meet the SCGs identified for this site because contaminated soils and LNAPL would remain in place. Alternatives 3 and 4 would both meet SCGs because soil and LNAPL would be removed.

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

Alternatives 1 and 2 would not be protective of human health and the environment because contaminated soils and LNAPL would remain in place. Alternative 3 would be protective of human health and the environment because contaminated soils would be removed. Alternative 4 would be protective of human health and the environment because contaminated soils would be treated.

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

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

Alternatives #1 and #2 would have minimal impacts because very little intrusive fieldwork would be involved with any long-term monitoring plan. Alternative #3 would have fewer short-term impacts than alternative #4 because soils would be excavated and disposed of off-site. Alternative 4 would have the most short-term impacts because soils would be treated on-site.

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.

Alternatives #1 and #2 would not permanently reduce the extent and magnitude of contamination. Alternative #2 would provide institutional controls to limit contact with contaminated soils and groundwater. Both alternatives #3 and #4 would permanently reduce the extent and magnitude of contamination.

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

Alternatives #1 and #2 would not reduce the toxicity, mobility, or volume of contamination. Both alternatives #3 and #4 would reduce the toxicity, mobility, and volume of contamination.

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.

Alternative #1 would easily be implemented because it involves no action. Alternative #2 would require implementation of institutional controls and a long-term monitoring plan. These activities would be easily implemented. Alternative #3 and #4 can both be implemented in a timely manner; however, alternative #4 would be included with remediation of operable unit

#1. This would be easier to implement administratively because there would be one contract and one remedial design for both operable units.

7. Cost. Capital and operation and maintenance costs are estimated for each alternative and compared on a present worth basis. Although cost is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, cost effectiveness can be used as the basis for the final decision. The costs for each alternative are presented in *Table 3.*

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

8. Community Acceptance - Concerns of the community regarding the SI/RAR reports and the Proposed Remedial Action Plan have been evaluated. The "Responsiveness Summary," included as Appendix A presents the public comments received and the manner in which the Department will address the concerns raised. In general, the public was supportive of the selected remedy. The main concern raised by the public was the time it takes to remediate the site.

SECTION 8: SUMMARY OF THE SELECTED REMEDY

Based on the results of the APCO SI/RAR, the July 1998 ROD for APCO, Operable Unit #1, and the Phase II investigation, and the evaluation presented in Section 7, the NYSDEC is selecting alternative #4, excavation and on-site treatment of contaminated soils with recovery of LNAPL product as the remedy for this site.

This selection is based on the evaluation of the four alternatives developed for this site. The no action alternative and the institutional controls alternative will not comply with the threshold criteria. Alternatives #3 and #4 will meet all of the criteria. The only major difference between these alternatives will be the ease of implementation. Alternatives #3 (excavation and off-site disposal of contaminated soils with LNAPL recovery) and #4 (excavation and on-site treatment of contaminated soils with LNAPL recovery) both permanently reduce the extent and magnitude of contamination. While both alternatives will remove contaminated soils exceeding SCGs, Alternative 4 will be able to be implemented with the remediation at operable unit #1 in a more timely and cost-effective manner. This will add an incremental cost to the remediation of operable unit #1. Also, the design of alternative #4 will be included with the remediation of operable unit #1. Remediation of operable units #1 and #2 will take place simultaneously under one construction contract. These administrative details make alternative #4 the preferred remedial action.

The estimated present worth cost to implement the remedy is $175,000. The cost to construct the remedy is estimated to be $131,450 and the estimated average annual operation and maintenance cost for 5 years $10,500.

The elements of the proposed remedy are as follows:

1. A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. Any uncertainties identified during the previous investigations will be resolved. As stated in the responsiveness summary for the APCO ROD, the design will address community issues such as: air monitoring, odors, rodents, and concerns raised by citizens during the public meeting. The remedial design will be incorporated into the design for operable unit #1.

2. A design-phase investigation to delineate the extent of soil removal and determine the extent of LNAPL on the former APCO and Artuso properties. The scope of the design phase investigation for operable unit #1 will be expanded to include the remediation of operable unit #2;

3. Excavation of contaminated soils for treatment in the ex-situ biological soil treatment system for operable unit #1. All on-site petroleum-contaminated soils will be excavated and treated with soils from operable unit #1 until site-wide remedial goals have been achieved (see Table 1). Treated soils will be used on-site as backfill;

4. Construction of a LNAPL collection system to address petroleum products detected in well MW-3A. Recovered LNAPL will be disposed of off-site. The groundwater recovery and treatment system for operable unit #1 will be expanded to include collection and treatment of groundwater in the vicinity of well MW-3A as necessary. Contaminated groundwater will be recovered and treated until SCGs are achieved or until concentrations reach asymptotic levels for a sustained period indicating continued operation will not result in significant mass removal of contamination; and

5. Since the remedy results in untreated hazardous substances in groundwater remaining at the site, a long-term 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 program for the site. There will be no restrictions for the use of on-site soils after the remedy is implemented. Any long-term monitoring program will be included with the operation and maintenance program for operable unit #1.

SECTION 9: HIGHLIGHTS OF COMMUNITY PARTICIPATION

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

- A repository for documents pertaining to the site was established.

- A site mailing list was established which included nearby property owners, local political officials, local media and other interested parties.

- Fact Sheet - On February 11, 2000, A fact sheet was distrubuted to parties on the mailing list announcing a public meeting and providing a brief site status update.

- Public Meeting - A public meeting was held on March 2, 2000 to discuss the details of the PRAP.

- In March 2000, a Responsiveness Summary was prepared and made available to the public, to address the comments received during the public comment period for the PRAP.

Table 1
Nature and Extent of Contamination in Soils

Contaminant of Concern and Contaminant Class	Standards, Criteria, and Guidance Values (SCGs)	Number of SCG Exceedances	Detected Concentration Range
Volatile Organic Compounds	(ppb)		(ppb)
benzene	60	1/7	ND to 1,200
Semi-volatile Organic Compounds (SVOCs)	(ppb)		(ppb)
dibenzofuran	6,200 or SB*	1/7	ND to 14,900
benzo(a)anthracene	224 or SB*	2/7	577 to 60,100
benzo(a)pyrene	61 or SB*	2/7	611 to 61,200
benzo(b)fluoranthene	1,100 or SB*	1/7	642 to 66,500
benzo(k)fluoranthene	1,100 or SB*	1/7	ND to 1,900
chrysene	400 or SB*	2/7	73 to 62,100
indeno(1,2,3-cd)pyrene	3,200 or SB*	1/7	ND to 31,800
phenanthrene	50,000 or SB*	1/7	767 to 176,000
fluoranthene	50,000 or SB*	1/7	1,200 to 193,000
pyrene	50,000 or SB*	1/7	965 to 148,000
Petroleum Contaminants			(ppb)
diesel fuel		One Sample	3,900,000
Metals	(ppm)		(ppm)
mercury	0.2 or SB	2/7	ND to 0.452

ppm - parts per million
ppb -parts per billion
*Total residual PAHs remaining after cleanup shall be 5 ppm or less.
Cleanup goals are based upon NYSDEC TAGM 4046, operable unit #1 ROD, and site background values.
ND - Not Detected
SB - Site Background

Table 2
Selected PAHs in Background Surface Soils Samples

Semi-volatile organic compound (SVOC)	Soils Sample Concentration (µg/kg)		
	Maximum	Minimum	Average
benzo(a)anthracene	2,900	240	1,688
benzo(a)pyrene	3,900	330	2,346
benzo(b)fluoranthene	4,400	340	2,628
benzo(k)fluoranthene	3,700	380	2,156
chrysene	3,600	300	2,080
dibenzo(a,h)anthracene	9,000	70	2,896

1 µg/kg= 1 ppb
1,000 ppb= 1 ppm
Samples obtained in residential neighborhood surrounding the site
Total PAHs in five background samples ranged from 3.2 ppm to 40.6 ppm with an average concentration of 26 ppm.

Table 3
Remedial Alternative Costs

Alternative Number	Remedial Alternative	Capital Cost	Annual O&M	Total Present Worth
1	No Action	$0	$0	$0
2	Institutional Controls	$0	$4,200	$51,600
3	Excavation and Off-site Disposal	$150,000	$10,500	$193,000
4	Excavation and on-site treatment	$131,450	$10,500	$175,000

Figure 1
Site Location Map

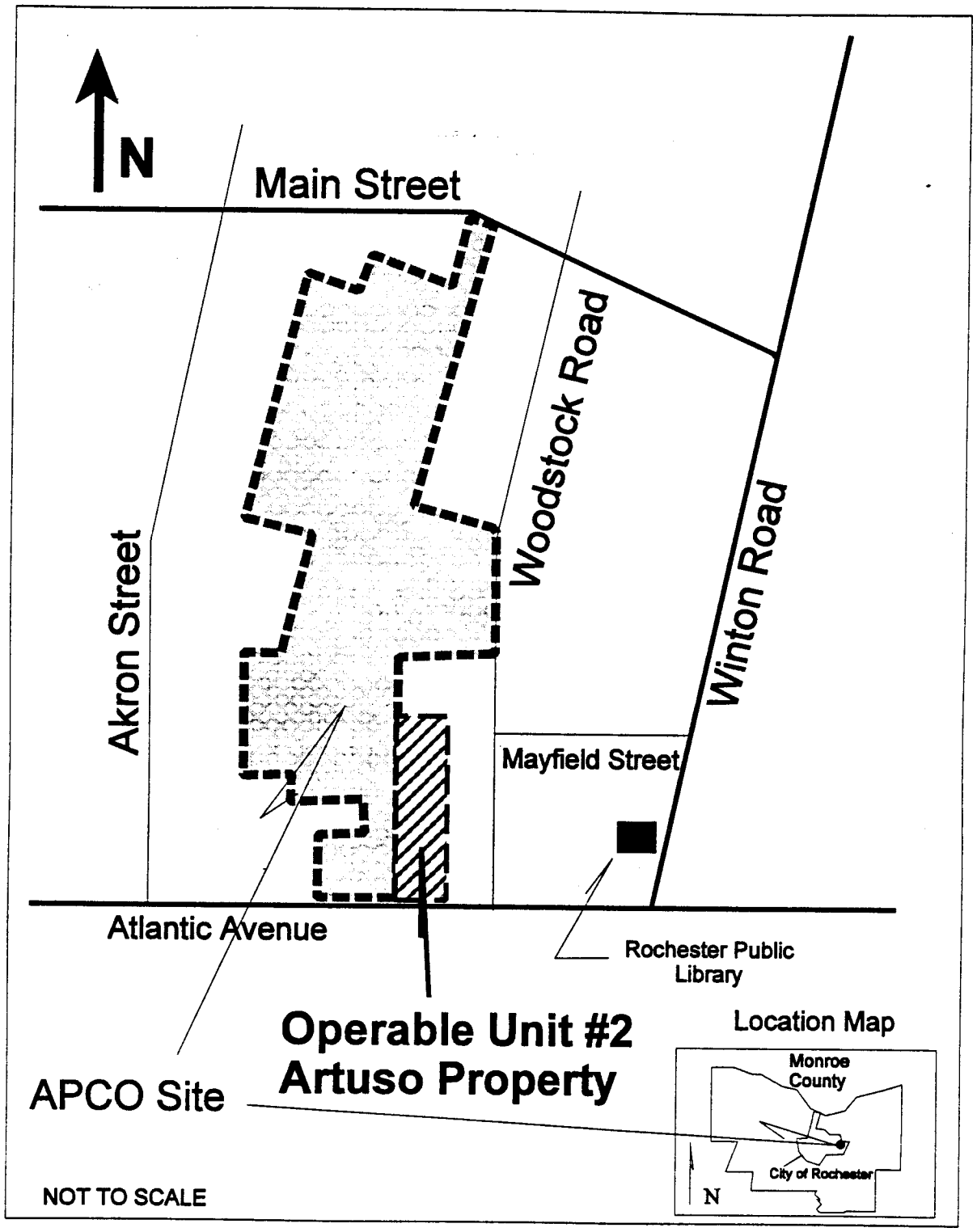


Figure 2
General Site Layout

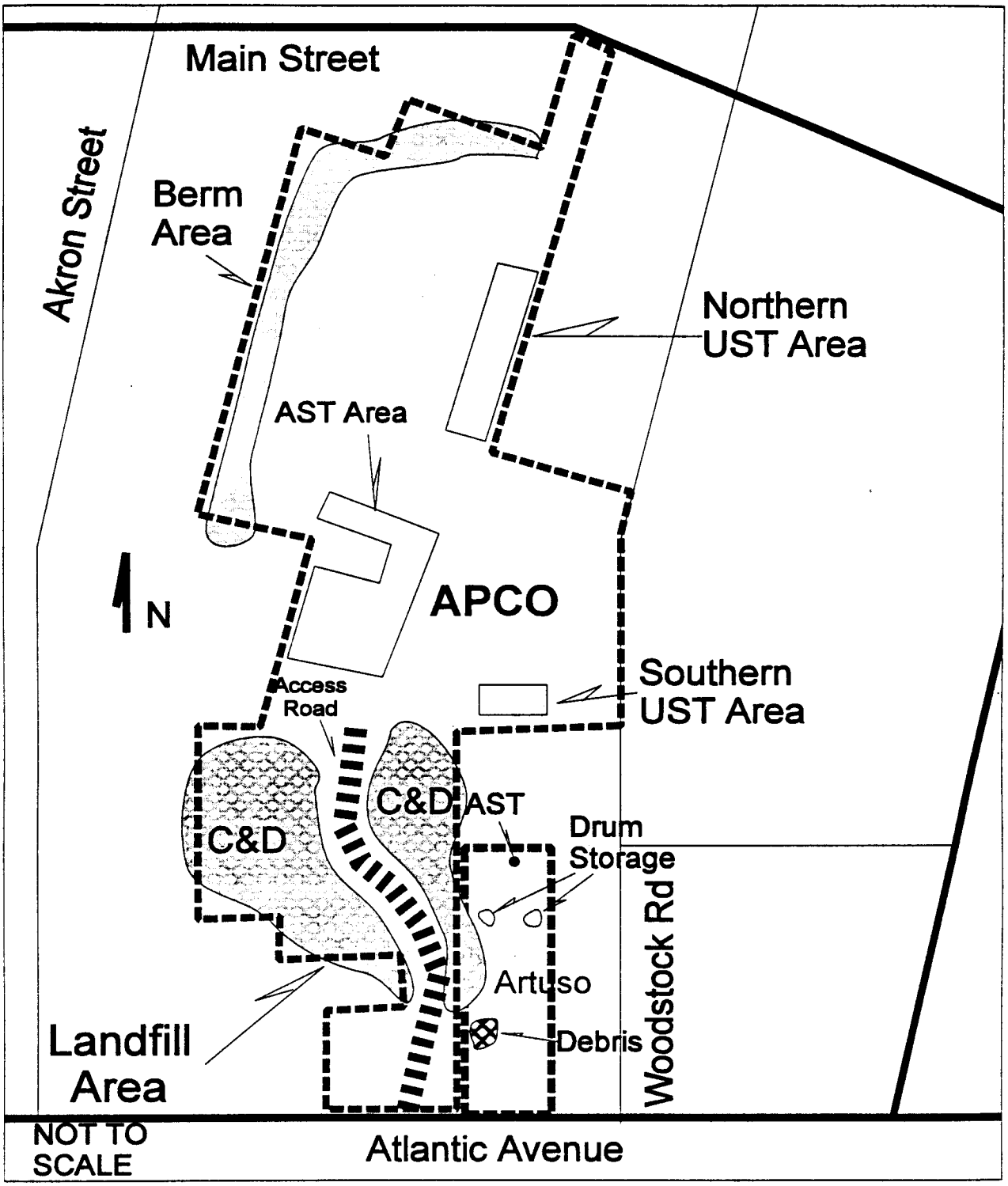


Figure 3
Monitoring Well Location and Water Table Elevations

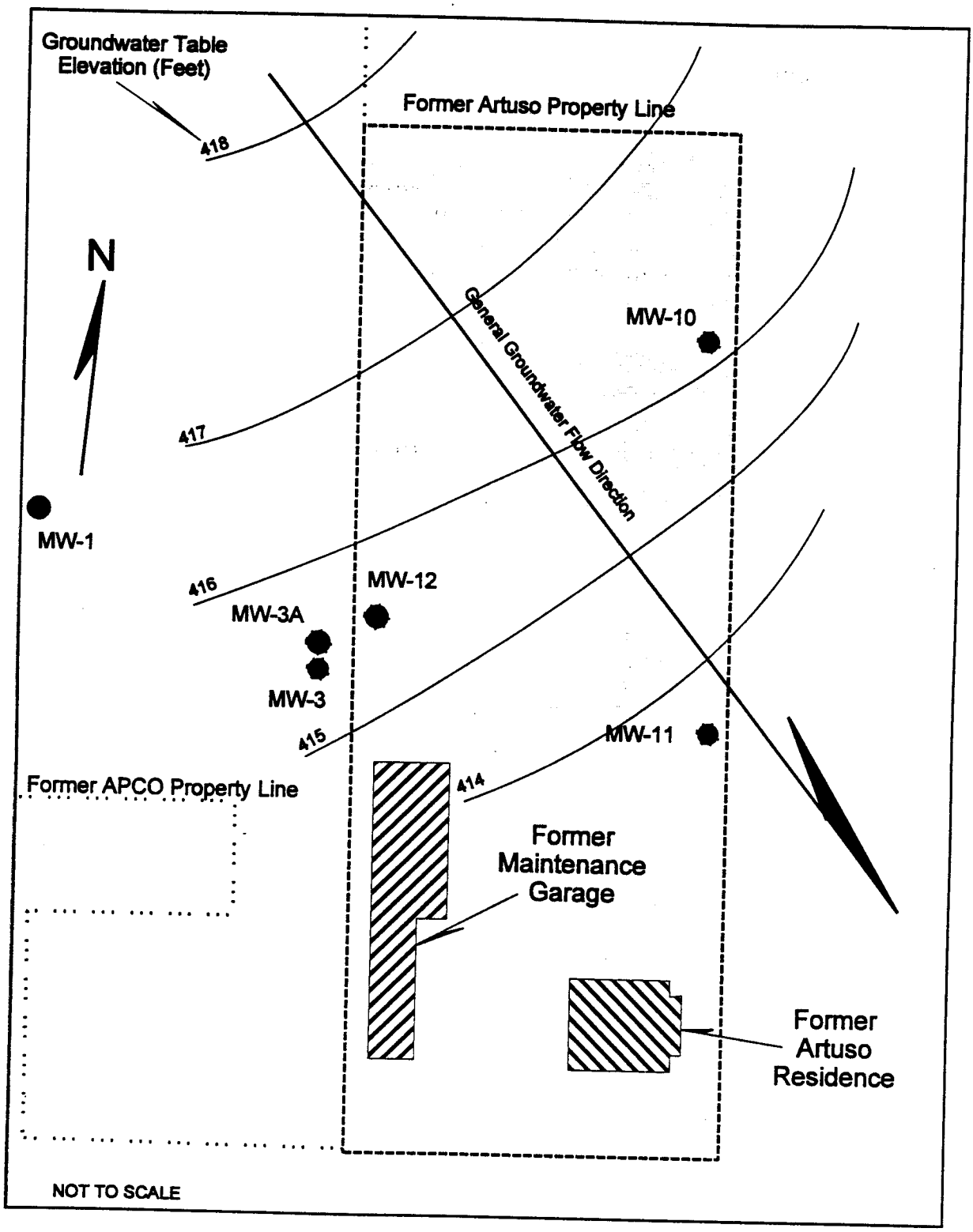
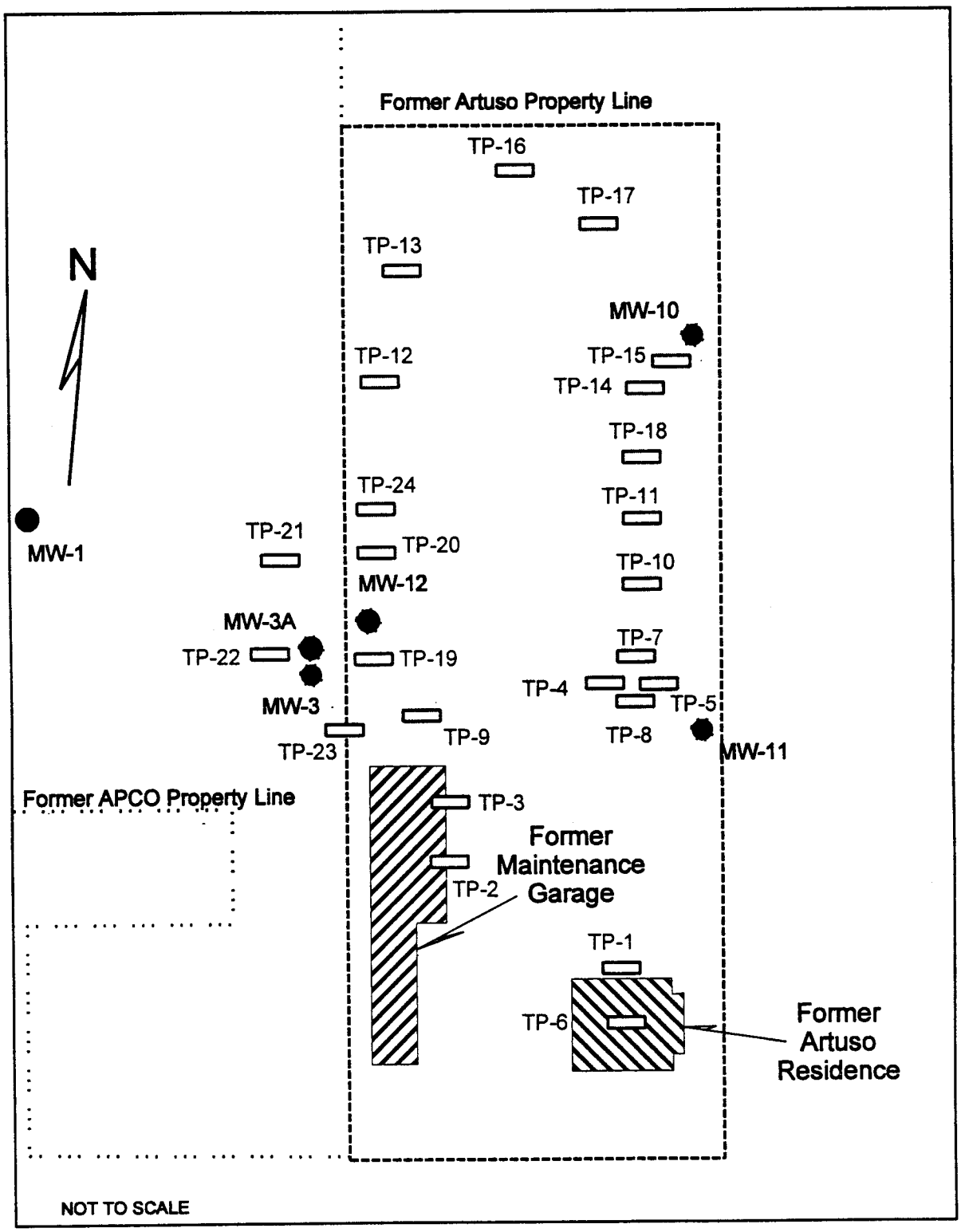


Figure 4
Test Pit Locations



APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Former APCO Property
Operable Unit #2, Artuso Property
City of Rochester, Monroe County, New York
Site No. B-00001-8
March 2000

The Proposed Remedial Action Plan (PRAP) for the former Artuso Property, was prepared by the New York State Department of Environmental Conservation (NYSDEC) and issued to the local document repository on February 11, 2000. This Plan outlined the preferred remedial measure proposed for the remediation of the contaminated soil and groundwater at the former Artuso Property. The preferred remedy is excavation and on-site treatment of contaminated soils with recovery of LNAPL product.

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

A public meeting was held on March 2, 2000 which included a presentation of the Phase II Investigation as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. There were no written comments received during the public comment period which ended on March 26, 2000.

This Responsiveness Summary responds to all questions and comments raised at the March 2, 2000 public meeting.

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

Comment #1: Why were the trees removed from the APCO site this past summer?

Response#1: *Trees were removed last summer to facilitate installation of the new perimeter fencing. More trees will need to be removed during implementation of the final remedy.*

Comment #2: Will the landfill area be replaced with loam after it is dug up?

Response #2: *The composition of the final cover material has not been specified at this time; however, typically 4-6 inches of top soil would be placed as final cover.*

Comment #3: Will there be any examination of the surrounding properties to look for contamination on those properties?

Response #3: *Yes, there will be an investigation on surrounding properties to confirm the extent of groundwater contamination from the former Artuso property. This investigation work plan is currently under review by the Department. Fieldwork is expected to begin in the Spring of 2000.*

Comment #4: The site is very muddy right now. Will there be seeding and general cleaning of the grounds this year, or will all work stop until the 2001 construction activities? Can some seeding be done this year to address the current problem?

Response #4: *The City of Rochester had Sear-Brown inspect the site on March 6, 2000. The inspection noted the hay bales and silt fence at the East Main entrance are in-place and appear to be doing their job well (i.e. silt, leaves and debris on upgradient side, clean asphalt on downgradient). However, it was noted that a total of approximately 455 linear feet of fenceline could potentially allow off-site runoff at various locations during a storm event. The City will proceed with placing additional hay bales in these areas. Seeding of selected areas will be evaluated.*

Comment #5: Does the City of Rochester plan to pay for the Artuso property?

Response #5: *The City of Rochester will work with Mr. Artuso regarding the legal negotiations.*

Comment #6: Will anything be done to address poor conditions on the berm this summer?

Response #6: *The City of Rochester will evaluate the perimeter areas where excavations occurred over the past year. The City will place hay bales along certain areas of the perimeter to prevent silt run-off. If there continues to be a problem with erosion, certain areas of the site may be hydroseeded.*

Comment #7: When the final construction work begins in 2001, will the berm material be used for fill elsewhere on the site?

Response #7: *If the berm materials are uncontaminated and suitable as backfill material, they will be used on-site if needed.*

Comment #8: What if adjoining properties are contaminated? Will you take action against those property owners?

Response #8: *If we find contamination off-site from the APCO or Artuso properties, it will be cleaned up. If a new source of contamination is found, it will have to be addressed as a separate issue.*

Comment #9: How did the timing of the project get backed up so much? Artuso is a small property compared to APCO. If the money for cleanup is already there, is there another reason this is being held up?

Response #9: *The slow down was caused by the administrative process needed to bring the Artuso property into the APCO project. However, the overall amount of time needed to clean up these properties will actually be shorter, because there will only be one contract for the entire project, instead of two separate contract preparation and bidding processes.*

APPENDIX B

Administrative Record

Appendix B - Administrative Record

Citizen Participation, Contracts, and PRAP

Preliminary Remedial Action Plan (PRAP), February 2000.

Public Meeting Announcement, February 2000.

Notice of Acquisition, City of Rochester vs. Michael Artuso, October 1998.

Record of Decision, Former APCO Property, July 1998.

Work Plans and Reports

Phase II Environmental Site Investigation Report, 1126 Atlantic Avenue, May 1999.

Former APCO Property SI/RAR Addendum, Volume IA, Sear-Brown, February 1998.

Former APCO Property Final SI/RAR Report, Volumes I - IV, Sear-Brown, February 1998.

Correspondence

Memo to T. Caffoe (NYSDEC) from M. Gregor (Rochester), RE: Summary of Wastes Removed from Artuso Property, January 2000.

Letter to M. Gregor (Rochester) from M. Storonsky (Sear-Brown), RE: Remedial Measures, Further Investigation and Opinion of Probable Costs, May 7, 1999.

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010

MEMORANDUM

TO: Tom Quinn, Assistant Director, Division of Environmental Remediation

FROM: Edward R. Belmore, Director, Bureau of Western Remedial Action, DER

RE: Former APCO Property, Operable Unit #2 - Artuso Property
Brownfield Restoration Site No. B-00001-8

DATE:

Attached are the following:

- Highlighted copy of the final draft ROD for this site. This shows the areas where revisions were made to address concerns discussed in the last ROD briefing.

- Transmittal package to Mike O'Toole, Jr. that includes;
  - Clean signature ready copy
  - DOH concurrence letter
  - Recommendation that he sign the ROD
  - Draft fact sheet announcing ROD completion

Please forward the signature package to Mike if you concur with our recommendation. If you have any questions, please give me a call.

Attachment

cc w/o attachment:
E. Belmore
T. Caffoe, Region 8

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010

MEMORANDUM

TO: Michael J. O'Toole, Jr., Director, DER

FROM: Tom Quinn, Assistant Director, DER

RE: **Recommendation to sign ROD - Former APCO Property, Operable Unit #2 - Artuso Property Brownfield Restoration Site No. B-00001-8**

DATE:

Attached is a signature ready copy of the final ROD for this site. Also attached is the final concurrence letter from DOH. The ROD has been revised pursuant to DEC management level review. BWRA recommends that the ROD be signed, and I concur.

Also attached is a draft fact sheet announcing the completion of this ROD. It will be issued shortly after the signed ROD is placed in the document repository.

Please let me know if you have any questions.

Attachment