Declaration

The selected remedy is protective of human health and the environment, complies with applicable State environmental quality standards, and is cost effective. This remedy satisfies the Department's preference for treatment that reduces the toxicity, mobility or volume of hazardous substances, pollutants or contaminants as the principal goal.

3/29/96
Date

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

DECLARATION STATEMENT - RECORD OF DECISION

Mineral Processing Inactive Hazardous Waste Site
Massena, St. Lawrence County, New York
Site No. 6-45-018

Statement of Purpose and Basis

This document describes the remedial actions that have been taken at the Mineral Processing Site, discusses the results of the Remedial Investigation and presents the rationale for reclassifying the site from a Class 2 Inactive Hazardous Waste Site to a Class 4 Inactive Hazardous Waste Site. The decision is in accordance with the New York State Environmental Conservation Law (ECL) 6 NYCRR Part 375, and is not inconsistent 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). Appendix C identifies the documents that comprise the Administrative Record for the Site, and includes the Interim Remedial Measure Report prepared by Blasland Bouck & Lee Environmental Services, Inc. of Syracuse, New York. The documents in the Administrative Record are the basis for the proposed reclassification of the site.

Assessment of the Site

Actual or threatened release of hazardous substances from this site, prior to the removal and containment of waste and building decontamination as described in this Record of Decision, presented a potential threat to public health, welfare or the environment.

Summary of the Governments Proposed Decision

Under the Consent Order General Motors completed an Interim Remedial Measure which removed and contained contaminated soils at the site. Upon completion of the Remedial Investigation conducted by BBL Environmental Services, Inc. on behalf of General Motors it was found that the site has been remediated in accordance with the Department's approved plans and order on consent. The site will require continued monitoring and maintenance to insure that the waste contained on site is properly managed. Therefore, the Department will reclassify the site from a Class 2 to a Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites.

A monitoring and maintenance plan will be developed and implemented for the site as long as contamination remains under the soil cap and in the groundwater. The Department will oversee and review all monitoring data and inspect the site on a regular basis to insure that the site is maintained in accordance with the approved monitoring and maintenance plan.

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Appendices

Department of Environmental Conservation

Division of Hazardous Waste Remediation Region 6

MINERAL PROCESSING
MASSENA, ST. LAWRENCE COUNTY, NEW YORK
SITE NO. 6-45-018

RECORD OF DECISION

Signed - March 1996

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* MICHAEL D. ZAGATA, *Commissioner*

I. SITE LOCATION AND DESCRIPTION

The Mineral Processing site, located off the General Motors Circle in the Town of Massena, St. Lawrence County, New York (Appendix B, Figure 1 and 2) borders Route 37 to the south, the Conrail rail lines (formerly New York Central Rail Road) to the west, and the General Motors Powertrain Facility (GM) to the north and east. Approximately 2000 feet north of the site lies the St. Lawrence River and approximately 2000 feet to the east of the site lies the St. Regis Mohawk Reservation. The Racquette River is located approximately 1000 feet south of the facility. The five-acre parcel is relatively flat with a gentle slope to the south and east. A steel and concrete manufacturing building, office building and storage areas which were utilized by the company during its operation once stood on the site. Operations were conducted at the facility from approximately 1982 to 1989 when the operations ceased. During the operations, Mineral Processing recovered aluminum from dross (an aluminum oxide from the processing of aluminum that contains residual amounts of metallic aluminum) and other scrap metal from the GM Plant.

A small drainage swale circumscribes the site to the south. A portion of the surface water flows in a northeasterly direction onto the GM property and subsequently to the plant's storm water detention basin. The remainder flows to the south toward Route 37 and the Racquette River. The area surrounding the property consists of grass, brush and wooded areas. The northern side of the plant is heavily industrialized by GM. Vacant lands surround the east, south and west sides of the site, except for State Route 37 and a rail line.

The geology beneath the site is comprised of a shallow layer of sand and gravel intermixed with traces of silt and clay which overlays a brown to grey glacial till unit. This glacial till is a massive, dense, silty to sandy, gray material. The average hydraulic conductivity value for this unit is 3.6 x 10^{-4} cm/s. Soil borings were advanced to between 18 and 25 feet below grade to install three on-site monitoring wells. Boring logs show a fairly consistent stratigraphy underlying the site which is consistent with the GM facility and the surrounding area.

The local groundwater flows to the south-southeast toward the Racquette River. Groundwater is encountered at 2-4 feet below grade. The nearest groundwater users are located approximately 4000 feet to the east on the St. Regis Mohawk Reservation. GM utilizes the St. Lawrence River for both drinking and process water.

II. SITE HISTORY

Operational/Disposal History

In April 1981, GM sold a 5-acre parcel of land adjacent to and south of the GM main plant facility to the Mineral Processing Corporation. From 1982 to 1988 the plant recovered aluminum from dross. In 1988 the source of dross had diminished and the plant started purchasing scrap die-casting machinery from the adjacent GM plant. In the process of dismantling the machinery, hydraulic oils containing polychlorinated biphenyls (PCBs) were spilled in and around the facility resulting in PCB contamination of soils, debris and concrete floors. In April 1989, the NYS Department of Environmental Conservation investigated the site by sampling soils within and adjacent to the building. PCBs were found in concentrations as high as 500 parts per million (ppm) in the dismantling bins inside the building and up to 150 ppm in areas adjacent to the building. On the basis of these findings, the Mineral Processing Site was listed as a "Class 2" site in the April 1991 Registry of Inactive Hazardous Waste Disposal Sites in New York. Mineral Processing ceased operations at the site in May 1989 and declared bankruptcy in November 1991.

Remedial History

On May 10, 1995, GM entered into an order on consent to perform an Interim Remedial Measure (IRM). All materials containing PCBs above 10 ppm were containerized and taken off site for disposal. Prior to the start of remediation, roofing materials containing asbestos was removed for proper off site disposal. Following the removal of the asbestos and debris contaminated with PCBs, the concrete floors and walls, steel and other structural materials were decontaminated to achieve a cleanup goal of 10 micrograms per 100 square centimeters (ug/cm2) as specified by Toxic Substance Control Act (TSCA) Polychlorinated Byphenyls Spill Clean Up Policy. Soils containing PCBs between one and 10 ppm were consolidated and placed beneath a 3 foot interim soil cap. Analysis of concrete surfaces verified that the goal of 10 micrograms per 100 square centimeters (ug/cm2) for PCBs had been obtained and no further capping or sealing of the concrete was required.

Upon completion of the PCB clean up action, the structure was razed and removed off site for reuse or disposal. This work was completed in late November 1995. The placement of topsoil, seed and mulch over the first 36 inches of the protective cap will be performed in the spring of 1996.

Monitoring wells were installed during November of 1995 in order to evaluate the impacts of the site contaminants on the local groundwater.

III. CURRENT STATUS

To assess the current status of the site, a focused remedial investigation was implemented by BBL Environmental Services, Inc. of Syracuse, New York. The following is a brief outline of the tasks and results which were performed. A complete discussion of the RI results and verification data can be found in the Final Engineering Report dated January 1996.

During November 1995, three monitoring wells were installed on site. One upgradient and two downgradient wells were installed and developed in order to evaluate groundwater quality. Wells are comprised of two inch-diameter polyvinyl chloride (PVC), a 10-foot length of 0.010 inch slotted screen and a 4-inch outer protective steel casing. Wells were sampled in December 1995 and January 1996. Monitoring well MPMW-2 showed concentrations of PCB at 0.27 μg/l. Because of the high turbidity levels (greater than 50 NTU) this well was further developed, resampled and subsequent groundwater analysis showed non-detectable levels of PCBs at a detection limit of 0.062 μg/l. Concurrently, soil samples taken during the monitoring well installation were analyzed and results showed the level of PCBs below one ppm in all cases.

Groundwater analysis for semi volatile organics (SVOCs) indicated non-detectable levels, with the exception of monitoring well # 3 (see figure 7) which showed 4-methylphenol at 17 μg/l and bis(2-ethylexyl)phthalate at 65 μg/l which exceeds 6NYCRR Part 703 groundwater quality standards of 1 μg/l and 50 μg/l, respectively.

Analyses of the three monitoring wells for metals showed iron at 3,320 μg/l, magnesium at 101,000 μg/l, manganese at 444 ppb and sodium at 35,500 ppb which exceed groundwater quality standards (See Appendix A, Table 2). The Remedial Investigation performed at the General Motors Facility in 1985 identified that monitoring wells MW-20, 20 A & 20 B, which are approximately 50 feet upgradient from the Mineral Processing site, contained metals at concentrations equal to or greater than the levels which were found at the Mineral Processing Site. Because upgradient concentrations exceed on-site levels, the concentrations of metals are not considered significant. The average concentrations for the metals of concern have been included in Appendix A, Table 2 for comparison purposes.

These wells, in conjunction with data obtained from wells found on the GM facility, were used to determine groundwater flow directions and patterns.

IV ENFORCEMENT

On May 10, 1995, General Motors Powertrain entered into an Order on Consent with the NYSDEC. Under the consent order, GM agreed to undertake an Interim Remedial Measure (IRM) to mitigate hazardous waste disposed on the site, and to study the effects of any residuals which may be found on site.

V. GOALS FOR REMEDIAL ACTION

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. These goals are established under the guidelines of meeting all standards, criteria, and guidance (SCGs) and protecting human health and the environment (Appendix A, Table 1).

The goals are:

- Reduce, control or eliminate the contamination present within soils on site.
- Eliminate the threat to surface waters in drainage swales surrounding the site by eliminating any future contaminated surface run-off from the contaminated soils on site.
- Eliminate the potential for direct human or animal contact with the contaminated soils on site.
- Mitigate the impacts of contaminated groundwater to the environment.
- Provide for attainment of SCGs for groundwater quality at the limits of the site.

VI. SUMMARY OF THE EVALUATION OF ALTERNATIVES

Since the hazardous waste above clean up goals was removed or contained on-site and the remedial investigation found that the site has had no further impacts on the groundwater or environment, the Department is not proposing any further analysis of remedial alternatives.

VII. SUMMARY OF THE GOVERNMENTS PROPOSED DECISION

Based upon GM's consultant's certification that all remedial actions were completed in accordance with approved plans and specifications under the IRM consent order, the Department believes that:

A. Remedial clean-up actions to protect human health and the environment have been completed.

B. Concrete, structural steel and debris have been decontaminated or removed from the site in compliance with both state and federal requirements.

C. Groundwater quality standards have been slightly exceeded for two semi-volatile organics, therefore, continued monitoring of the site's groundwater will be conducted to insure that human health and the environment are not adversely impacted beyond the current site boundary.

D. Soils containing residual PCB above clean up goals will be managed on site under a protective 42-inch soil cover and will be monitored to insure cap quality.

E. A detailed monitoring and maintenance plan will be developed to properly observe, test and document site conditions. The site will be revisited if changes in the monitoring data identifies unacceptable conditions.

These findings indicate that the site has been remediated in accordance with the approved plans and terms of the order on consent, Therefore, the Department will reclassify the site from a Class 2 to a Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. A Class 4 site is defined as a site which has been properly closed and requires continued management.

Monitoring and maintenance will be required at the site as long as contamination remains under the soil cap and in the groundwater. The Department will oversee and review all monitoring data and inspect the site on a regular basis to insure that the site is maintained in accordance with the approved monitoring and maintenance plan.

VIII. CITIZEN PARTICIPATION

A Citizen Participation Plan was developed and implemented by General Motors and the NYSDEC. Major documents were placed in document repositories in the vicinity of the site and made available for public review. A public contact list was developed and used to distribute the Proposed Remedial Action Plan and meeting announcements.

On March 12, 1996, a public availability session was held concerning the results of the RI and the Proposed Remedial Action Plan.

On March 26, 1996, at the end of the public comment period, all verbal and written comments were summarized and responded to. The comments and corresponding responses are found in Appendix C in the Responsiveness Summary.

Appendix A

APPENDIX A

TABLE 1
NEW YORK STATE STANDARDS, CRITERIA AND GUIDANCE APPLICATIONS TO THE MINERAL PROCESSING SITE

STATUTE, REGULATION OR PROGRAM	CATEGORY
NYSDEC TOGS 1.1.1-Ambient Water Quality Standards and Guidance Values	Action-specific Contaminant-specific Location-specific (point of discharge classification)
NYSDEC DHWR - Soil Cleanup Criteria	Action-specific Contaminant-specific Location-specific
NYSDEC Hazardous Waste Treatment Storage and Disposal Facility Permitting Requirements (6 NYCRR Part 373)	Action-specific Contaminant-specific
USEPA Health Based Soil Criteria for Systemic Toxicant and Carcinogens	Contaminant-specific
OSHA Standards (29 CFR 1900-1999)	Action-specific Contaminant-specific Location-specific
Toxic Substance Control Act of February 1978, Polychlorinated Biphenyl Spill Clean Up Policy	Action-specific Contaminant-specific Location-specific

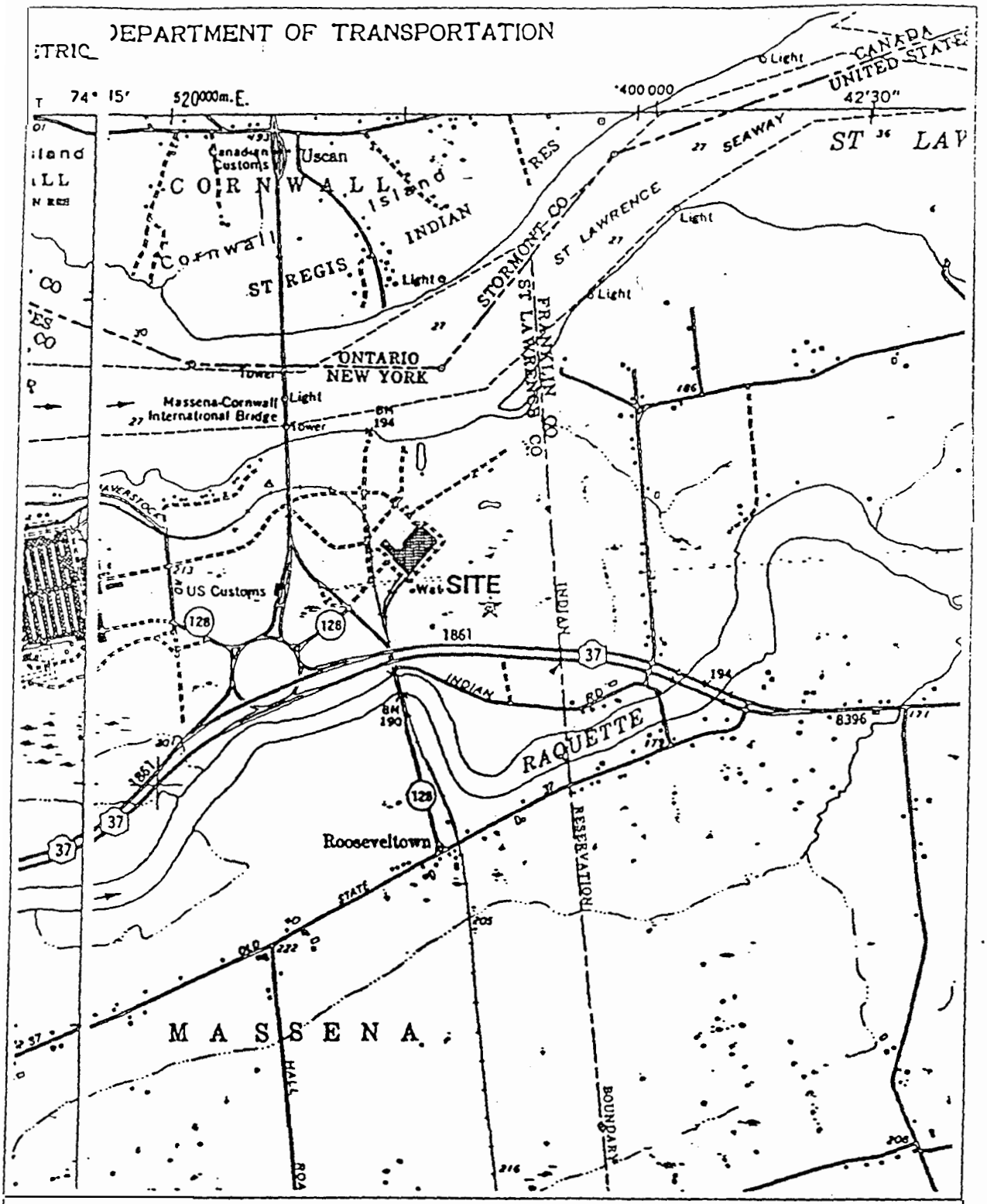
Appendix A
Table 2

Representative Contamination
for the
Mineral Processing Site
No. 645018

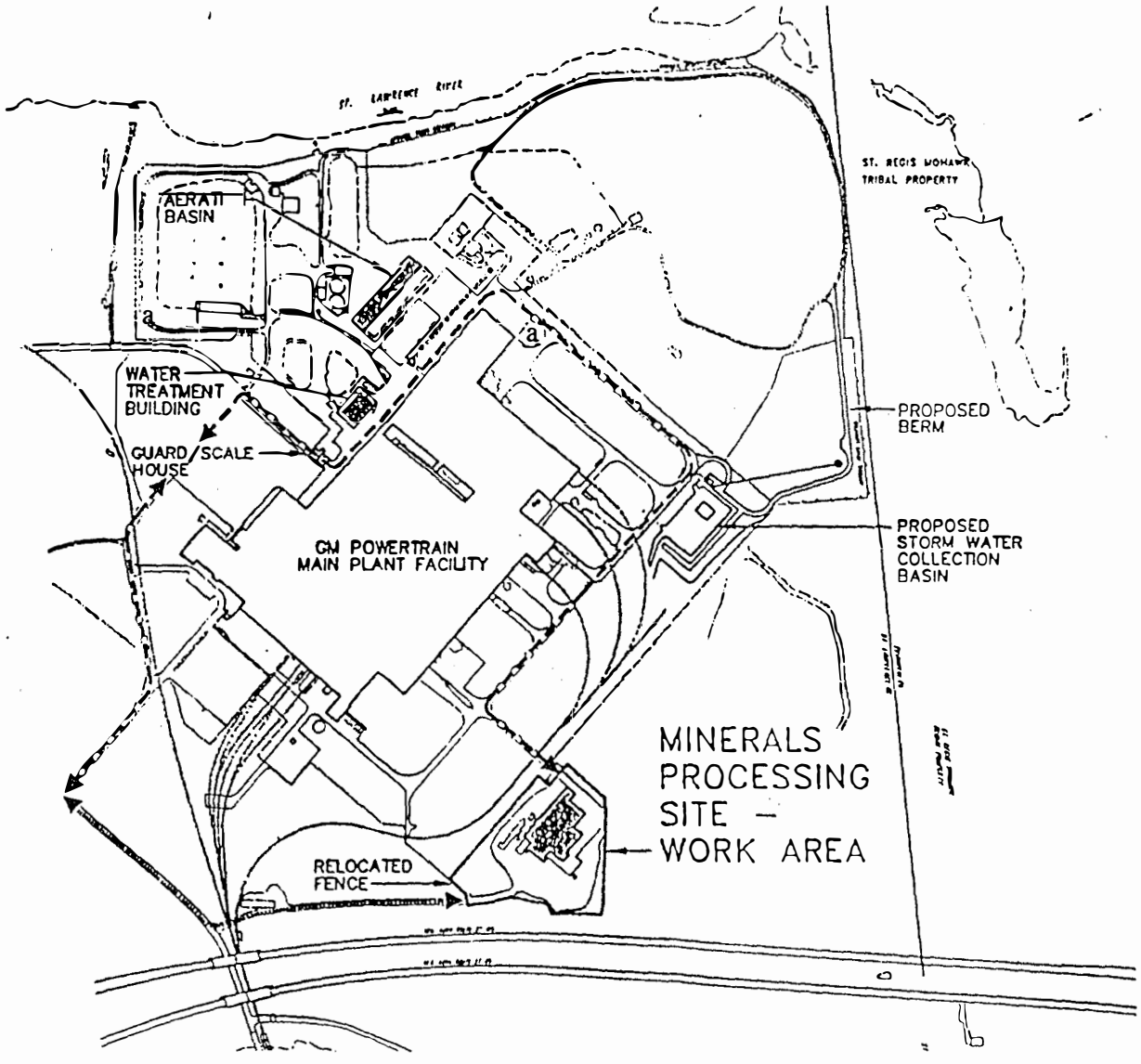
Contaminant	Media	Minimum	Maximum	Upgradient Average	Average	Cleanup Goal	No. That Exceeded	Well#	No. of Samples
Xylene	Groundwater	Non Detect	21 ppb	N/A	N/A	5 ppb	1	MW-3	3
4-Methylphenol	Groundwater	Non Detect	17 ppb	N/A	N/A	1 ppb	1	MW-3	3
Bis(2-Ethylhexyle)phthalate	Groundwater	Non Detect	65 ppb	N/A	N/A	50 ppb	1	MW-3	3
Iron	Groundwater	Non Detect	3,320 ppb	59,733 ppb	2,174 ppb	300 ppb	2	MW 1 & 2	3
Magnesium	Groundwater	37,900 ppb	101,000 ppb	217,533 ppb	67,900 ppb	35,000 ppb	3	MW-1, 2 & 3	3
Manganese	Groundwater	129 ppb	444 ppb	1778 ppb	237 ppb	300 ppb	1	MW-2	3
Sodium	Groundwater	48,000 ppb	35,500 ppb	90,333 ppb	24,067 ppb	20,000 ppb	2	MW 1 & 2	3

Note: General Motors upgradient well information was obtained from the Draft Remedial Investigation For RI/FS at GMC-CFD Massena Facility, Dated May 1985.

Appendix B



MINERAL PROCESSING - Figure 1



– MINERAL PROCESSING - Figure 2 –

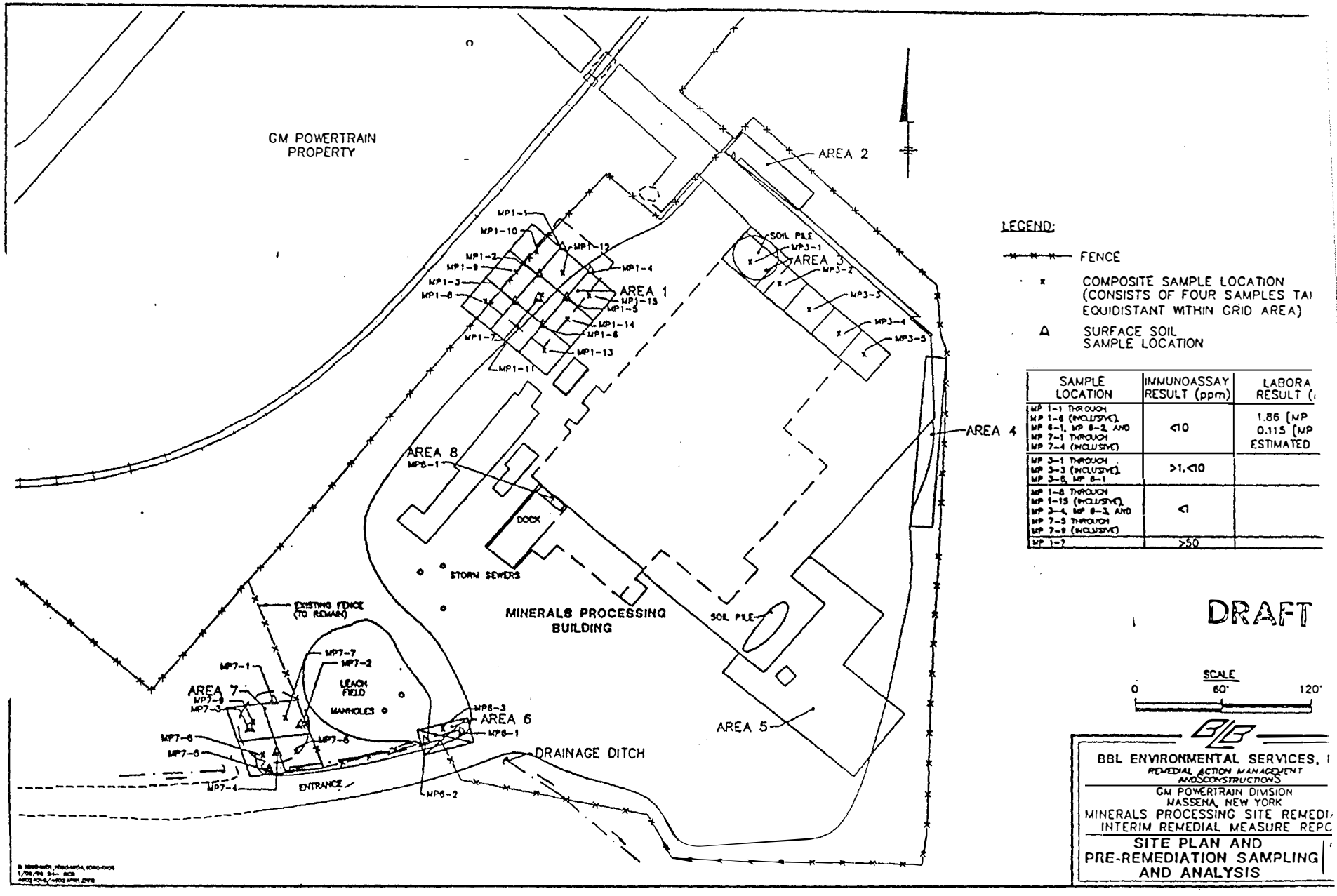
BBL ENVIRONMENTAL SERVICES, INC.
REMEDIAL ACTION MANAGEMENT AND CONSTRUCTION

GM POWERTRAIN DIVISION
MASSENA, NEW YORK

MINERALS PROCESSING

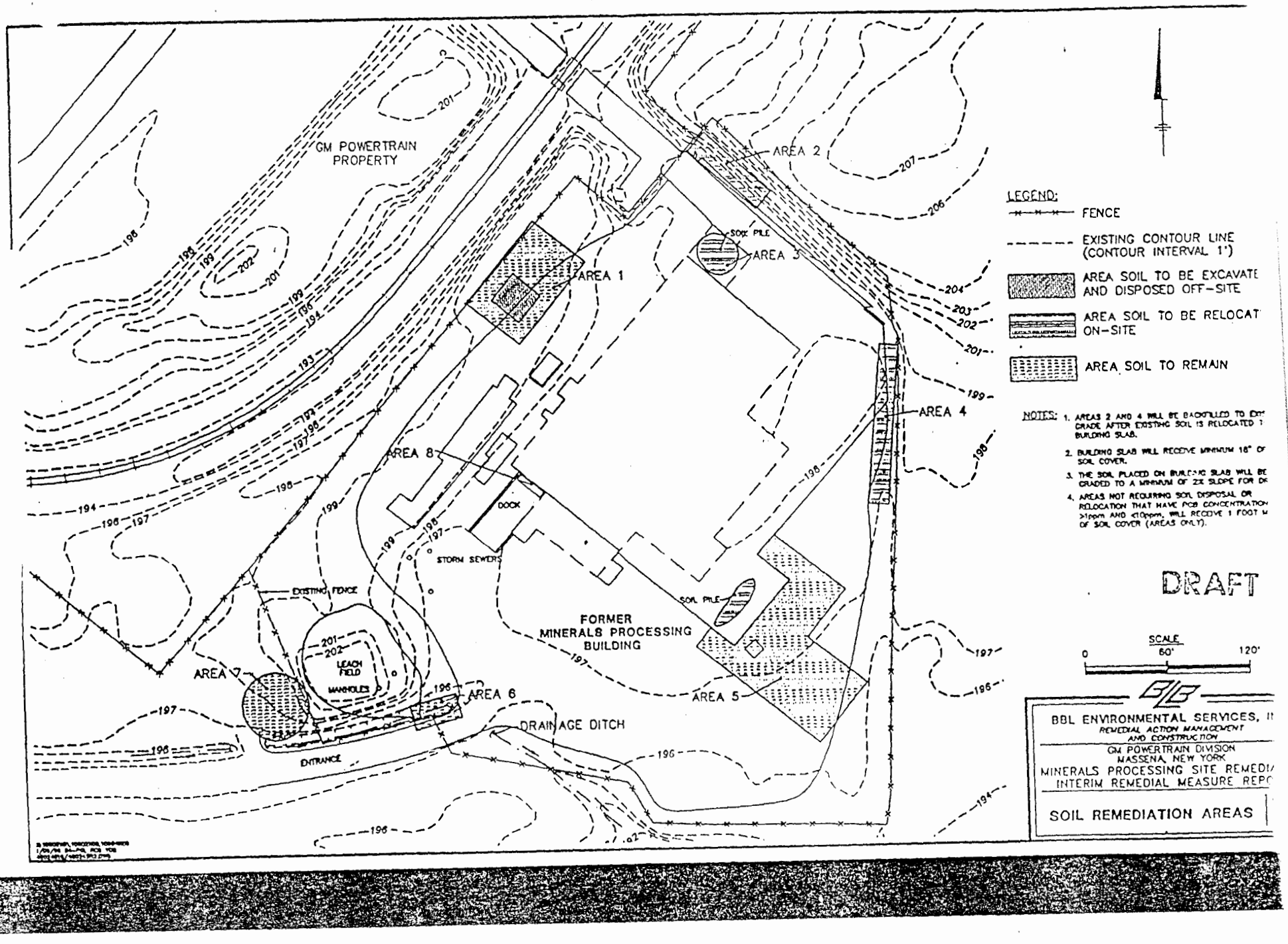
SITE ACCESS PLAN

FIGURE 2

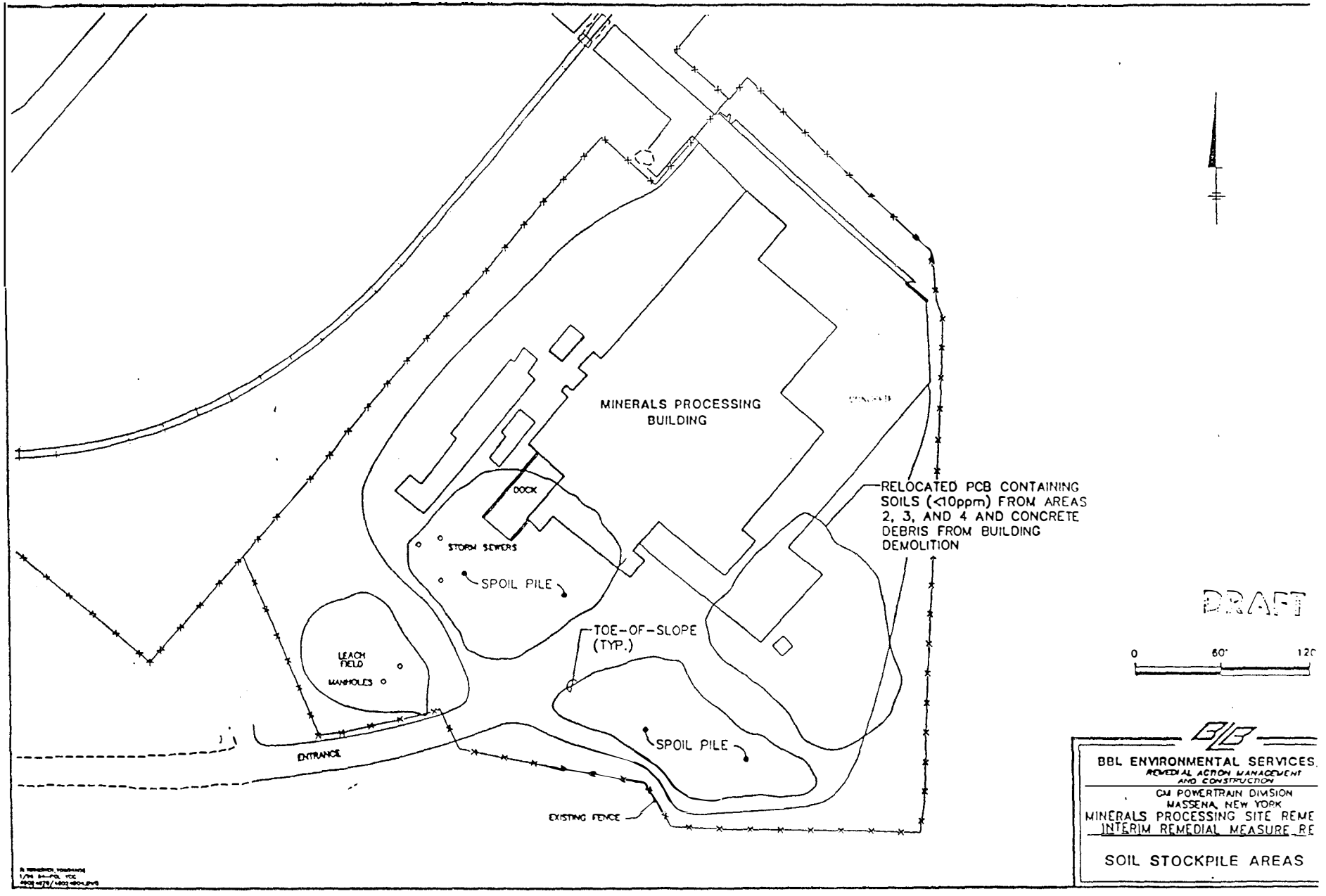


SAMPLE LOCATION	IMMUNOASSAY RESULT (ppm)	LABORA RESULT (
MP 1-1 THROUGH MP 1-6 (INCLUSIVE), MP 8-1, MP 8-2 AND MP 7-1 THROUGH MP 7-4 (INCLUSIVE)	<10	1.86 (MP 0.115 (MP ESTIMATED
MP 3-1 THROUGH MP 3-3 (INCLUSIVE), MP 3-5, MP 8-1	>1, <10	
MP 1-8 THROUGH MP 1-15 (INCLUSIVE), MP 3-4, MP 8-3, AND MP 7-3 THROUGH MP 7-8 (INCLUSIVE)	<1	
MP 1-7	>50	

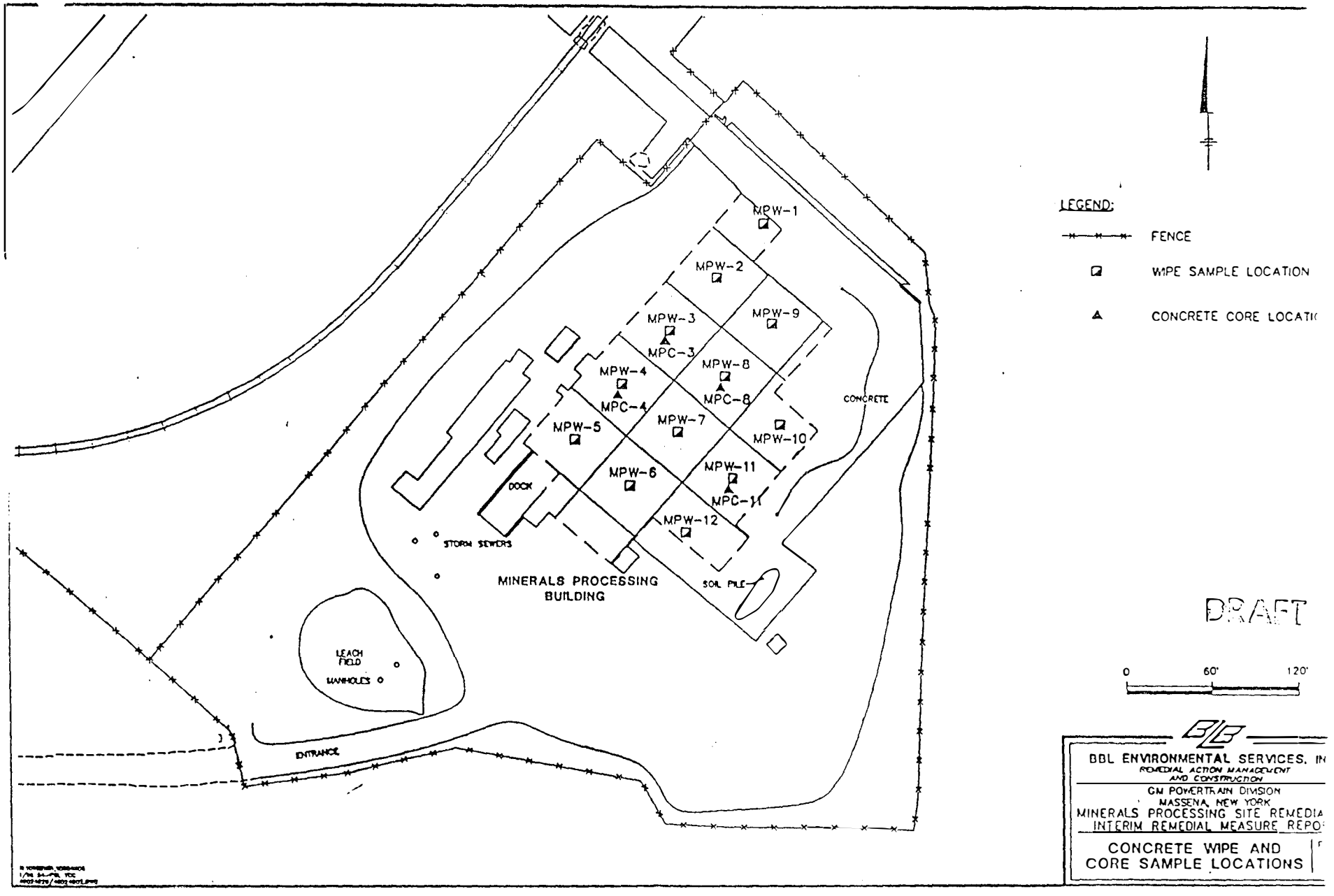
MINERAL PROCESSING - Figure 3 -



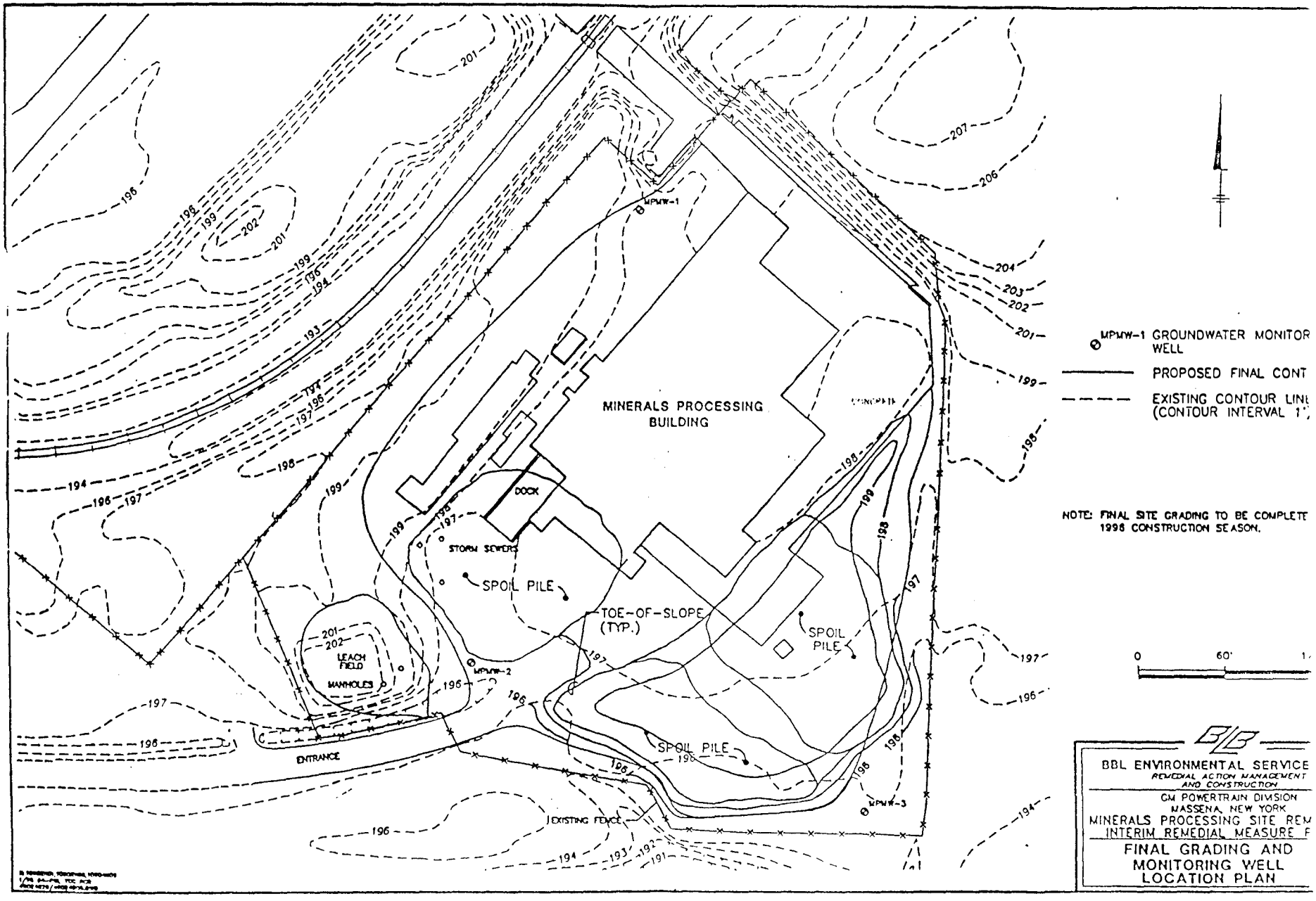
MINERAL PROCESSING - Figure 4



MINERAL PROCESSING - Figure 5



MINERAL PROCESSING - Figure 6



MINERAL PROCESSING - Figure 7

Appendix C

APPENDIX C
ADMINISTRATIVE RECORD

Order on Consent, # A6-0325-95-02, Dated May 10, 1995.

II. Work and Waste Handling Plan, Prepared by BBL Environmental Services, Inc., Dated September 1995.

III. GM Interim Remedial Measure Program, Prepared by BBL Environmental Services, Inc., Dated March 1995.

IV. Sampling and Analysis Plan, Prepared by BBL Environmental Services, Inc., Dated April 1995.

V. Health and Safety Plan, Prepared by BBL Environmental Services, Inc., Dated April 1995.

VI. Interim Remedial Measure Report, Prepared by BBL Environmental Services, Inc., Dated February 1996, Volumes 1 & 2.

RESPONSIVENESS SUMMARY
MINERAL PROCESSING
SITE NO. 6-45-018

Comments provided by the St. Regis Mohawk Tribe, Environmental Division, Rt 37, Box 8A, Hogansburg, New York 13655, Ken Jock, Environmental Director, Dated February 9, 1996:

Comment No. 1:

- *The SRMT has a vested interest in cleaning up this site because it impacts the wetlands, wildlife and plant life in our area. We would prefer a more thorough clean up of this site. Capping soil between 1 and 10 ppm is not acceptable to the SRMT. We do not believe that is adequate for long term exposure for this climate.*

Response No. 1:

- *The 42 inches (36 inches of clean fill and 6 inches of topsoil) protective cover will be monitored and maintained by General Motors. As long as soils contaminated with PCBs above 1 ppm remain on site, maintenance and monitoring will be performed. A comprehensive monitoring and maintenance plan will be developed to properly control and document current conditions.*

Comment No. 2:

- *The SRMT does not approve of composite sampling for characterization and verification for clean up of soils in the different areas shown in figure 1 and using Immuno assay testing for verification the clean up is complete for these areas of concern. All samples collected for verification should have been sent to a certified lab for analysis.*

Response No. 2:

- *The Department currently utilizes the Immuno Assay testing method successfully at numerous projects in the Massena area. Ten percent of all samples were sent to a certified laboratory for confirmation. Department inspectors oversaw the sampling events and the composite sampling that was conducted. Given the large quantity of data already available at this Immuno Assay testing was considered to be a logical analytical procedure.*

Comment No. 3:

- *BBL did a minimal amount of work for characterization of contamination at this site. For instance, only surface soil sampling was done at this site. Why did BBL not perform deep borings at the site? Was there any sampling done in the storm and drainage sewage lines and manholes? No samples were collected outside the fence line. The SRMT would like to see a more thorough sampling plan for this site., before declassification from a class 2 to a class 4.*

Response No. 3:

- *BBL utilized the large amount of data which had been previously generated during various sampling events conducted by Mr. Ward Stone, NYSDEC Pathology Unity - April 1989, Mr. J. Sauve, Sauve Inc. - August 1989 and Ms Kathryn Eastman, NYSDEC - August 1994. In all, 85 samples were taken prior to GM's involvement. All samples were individual grab samples analyzed by a certified laboratory. These samples consistently identified the same areas of concern and were utilized by BBL to prepare their sampling plan. BBL performed additional sampling to verify and further define known areas of contamination.*

- *Deep soil sampling was conducted during the monitoring well installation. Continuous split spoon sampling was conducted to evaluate deeper contamination. Wells were placed in areas associated with contamination. Soil samples at depth did not identify any contamination above soil clean up goals (see tables 4, 5 & 6 - Interim Remedial Measure Report).*

- *Sampling of the storm drains, septic tank, piping and leach field holding tank were conducted by R.H. Struble, P.E., Consulting Engineers and no PCB contamination was found.*

- *Sampling was conducted in the drainage swales south and west of the site by NYSDEC and BBL. No remediation was required. Sampling of the drainage swales may be required as part of the Maintenance and Monitoring Plan.*

Comment No. 4:

- *BBL needs to drill more than three monitoring wells to get a better characterization of the groundwater flow in this area.*

Response No. 4

- *Monitoring wells installed during the 1985 Remedial Investigation at GM facility were utilized to develop a comprehensive understanding of both groundwater flow direction and upgradient groundwater quality.*

Comment No. 5:

- *The SRMT does not understand or approve of GM using this area consistent with GM operations. What does consistent with GM operations mean? Is it handling and disposing of hazardous waste? NYSDEC needs to put restrictions on this site for GM.*

Response No. 5:

- *This site will remain on the New York State Inactive Waste Site Registry. As such, the Department will monitor and oversee any activities which are proposed. The soils beneath the 18 inch protective cap must be maintained and be secure. No operations will be allowed which would jeopardize the integrity of the cap or potentially recontaminate the site. The Department, through the implementation of the Monitoring and Maintenance Plan, will closely examine all operations which are proposed.*

Comment No. 6:

- *In conclusion, the SRMT would like to see better communications at this site and a better restoration plan. We believe this site should be restored to its natural condition, before the Minerals Processing Plant was built on this property, and cleaned up so it could be of use for the future generation.*

Response No. 6:

- *The Department will keep all concerned parties apprised of site activities. Future use of the site will be restricted by the monitoring and maintenance requirements which GM will be obligated to implement.*

Comments provided by the St. Regis Mohawk Tribe, Environmental Division, Rt 37, Box 8A, Hogansburg, New York 13655, Ken Jock, Environmental Director, Dated March 25, 1996:

Comment No. 1

- *The SRMT opposes the capping of sediments between 1 and 10 ppm. The SRMT recommends a cleanup level of 1 ppm for this site. The Tribal ARAR is 1 ppm for soils. The reason for setting a low standard for PCB is to protect a culturally sensitive community such as Akwesasne, that is dependent on the environment for its survival.*

  The 1 ppm level will protect the smaller species on the food chain like the insects, benthic invertebrates and burroughing animals that live in the soil. Other life forms are dependent on these things for their survival, therefore we need to protect them the most, so the rest of the environment is healthy and stays in balance.

  The SRMT opposes capping of PCBs because we know they will not stay in their place; for example the pygmy shrew we found at the edge of the industrial landfill at GM which has a wet lipid weight of 20,000 ppm of PCBs.

  We know that capping material will breakdown over a long period of time and is therefore not a permanent solution.

Response No. 1

- *The 42 inches (36 inches of clean fill and 6 inches of topsoil) protective cover will be monitored and maintained by General Motors at infinitum. As long as soils contaminated with PCBs above 1 ppm remain on site, maintenance and monitoring will be performed. A comprehensive monitoring and maintenance plan will be developed to properly control and document current conditions and to insure that human health and the environment is protected.*

Comment No. 2

- *The nearest groundwater user is approximately 2000 feet southeast on Mohawk Territory.*

  The SRMT is concerned about the elevated levels of VOCs, semi-vocs, and heavy metals. We have residents on south side of Route 37 and on Indian Point Road that use wells as their drinking water. The SRMT recommends testing of wells in this area for vocs, semi-vocs and heavy metals, along with mw-19, 19A & 19B, which is about half way between Minerals Processing. We have included a map where residents live in relation to the site.

Response No. 2

- *General Motors will conduct groundwater sampling for contaminants of concern as long as analytical results identify a contravention of 6 NYCRR Part 703 groundwater standards. An Operation, Monitoring and Maintenance Plan will be developed to insure the protection of human health and the environment.*

Comment No. 3

- *Where is the groundwater flow direction underneath the Minerals Processing Site? Is it flowing to the Racquette River?*

Response No. 3

- *Local groundwater flows to the south-southeast towards the Racquette River.*

No other comments were recieved during the public comment period which closed March 26, 1996.

Appendix D