DECLARATION STATEMENT
RECORD OF DECISION

NORTHEAST ALLOYS AND METALS
City of Utica, Oneida County, New York
Site No. 6-33-045

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Northeast Alloys and Metals Site which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1999 (40 CFR 300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Northeast Alloys and Metals Site, and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix C of the ROD.

Assessment of the Site

Actual or threatened release of volatile organic compounds (VOCs) from this site, if not addressed by implementing the response action selected in this ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) Reports for the Northeast Alloys and Metals Site and the criteria identified for evaluation of alternatives, the NYSDEC has selected the following remedy:

- Installation of a groundwater collection and treatment system based on the remedial design program. The groundwater collection and treatment system will treat contaminated water in order to discharge to an on site infiltration system.
- Installation of a soil vapor extraction system at RW-1 and RW-2.
- Excavate contaminated soil in the east gate area in the vicinity MW # 9 to meet soil clean up goals.
- Implementation of a site-wide operation, monitoring and maintenance program to insure that the remedial program is effective and remedial action goals are obtained.
- Institutional controls such as deed restrictions on groundwater use will be implemented until groundwater standards are obtained.

- The remedial design will 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 RI/FS will be resolved. This will include the determination of the size, location and number of groundwater and soil vapor extraction wells.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

3/31/98
Date

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

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UTICA (C), ONEIDA COUNTY, NEW YORK
SITE NO. 6-33-045
March 1998

RECORD OF DECISION

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

SECTION 1: SITE LOCATION AND DESCRIPTION

The Northeast Alloys and Metals Site is located between State Route 5S and Dwyer Street in Utica, Oneida County, New York. The property is located in a mixed industrial/commercial area just inside the city limits, which forms the boundary between Oneida and Herkimer County (Figure 1-1). The New York Central Railroad runs in an east-west direction approximately 1500 feet north of the site. The Mohawk River flows in an easterly direction and is located approximately 1800 feet to the north.

The facility occupies about 3.9 acres and consists of a plant building, asphalt parking area, and loading dock area which occupy the southwest portion of the property. The plant building, which occupies approximately 21,000 square feet, is a one story masonry block structure. A small portion of the paved parking lot area, which contains the former underground storage tank (UST) and former drum storage area, is referred to as the "Courtyard" (Figure 1-2).

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

The property and buildings have been used for the manufacturing of electronic components in the 1950's, a machine shop in the 1960's, and as a commercial laundry in the 1970's. Northeast Alloys & Metals purchased the facility in April of 1986 and used the facility to recycle specialty metal parts. In January 1989 Northeast Alloys and Metals leased the property to ELG Haniel Trading's ("Trading") to perform the metal recycling operations. Trading ceased operations at the facility in October of 1991. The facility is currently unoccupied.

Chlorinated solvents were initially discovered during a post-closure investigation. The investigation was for a 10,000 gallon UST located in the Courtyard area and contained fuel oil. The tank removal was conducted in July of 1989.

As part of the tank removal, a 24 inch sump was placed in the vicinity of the tank removal area in order to collect contaminated groundwater and/or product. In August 1989, samples of the water found in the sump was found to contained Trichloroethene.

The use of chlorinated solvents was prevalent at the site, particularly in the metal degreasing operation. In addition, past employees stated that spent solvents were released to the environment when a forklift accidentally punctured a 55 gallon drum which was being loaded onto a truck for off site disposal.

2.2 Environmental Investigation History

In July of 1989 a spill was recorded with the NYSDEC (# 89-04225) for Northeast Alloys and Metals Inc.. A 10,000 gallon fuel oil storage tank and 55.68 tons of contaminated soils were removed from the tank area. Empire Soils Investigation installed four monitoring wells and twelve borings at the site to determine the impacts associated with the leaking tank.

In October 1989, a Hydrologeologic Investigation Report for the Northeast Alloys and Metals Site was submitted to the Department by Empire Soils Investigation Inc. The report summarized the tank removal and the subsequent analytical data. Water found in the sump installed in the former UST area was found to contain 70.8 ppb Trichloroethene.

In 1992, Huntingdon- Empire Soils Investigations Inc., conducted a follow up investigation to evaluate whether soil or groundwater in the immediate vicinity of the former UST had been impacted by solvents. Four borings were advanced and groundwater was found to contain Vinyl Chloride (Non Detect - 17 ppb) and 1,2-Dichloroethene (1 ppb). Water found in the sump installed in the former UST area was found to contain 1,055 ppb total VOC's.

In 1993, ERM Northeast conducted an investigation to further evaluate the extent of VOC contamination in soil and groundwater. Six borings and two monitoring wells (MW-5 and MW-6) were installed in the Courtyard. Chlorinated solvents up to 29,000 ppb were found in the newly installed groundwater wells.

In 1994, Harress Pickel Consultants conducted a soil gas and groundwater investigation to further evaluate the extent of VOCs in soil and groundwater. Soil gas was gathered from 16 locations on site and elevated levels of TCE and TCA were documented on site and an additional area to the north of the main building was found. This correlated with the historic location of the degreasing operation.

SECTION 3: CURRENT STATUS

The presence of hazardous waste at the site presents a significant threat to human health and the environment and the site was placed on the Registry of Inactive Hazardous Waste Sites as a class "2" in 1994. Civil and Environmental Consultants, Inc. has recently completed and revised a Remedial Investigation/Feasibility Study (RI/FS), dated February 12, 1998.

3.1: Summary of the Remedial Investigation

The purpose of the RI was to further define the nature and extent of any contamination resulting from previous activities at the site, and to collect data necessary to screen remedial alternatives.

A report entitled "Remedial Investigation/ Feasibility Study - Former Northeast Alloys and Metals Site, Utica, New York", dated January 1998 has been prepared describing the field activities and findings of the Remedial Investigation in detail. The RI activities included the following:

- **A review of all existing data.**
- **A soil gas survey.**
- **Sampling and analysis of water and sediments.**
- **Installation of soil borings and monitoring wells for analysis of soil and groundwater as well as physical properties of soil and hydrogeologic conditions.**
- **Investigation of historic underground storage tank locations.**
- **Investigation of the extent of migration of contaminated groundwater from the site.**

The analytical data obtained during the RI was compared to environmental Standards, Criteria and Guidance (SCGs). Groundwater, drinking water, and surface water SCGs identified for the Northeast Alloys and Metals site were based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part V of the NYS Sanitary Code. Soil SCGs are based on NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) 4046 soil cleanup guidelines for the protection of groundwater and background conditions.

Based upon the results of the remedial investigation in comparison to the SCGs and potential public health and environmental exposure routes, certain areas of the site require remediation. These are summarized below. More complete information can be found in the RI Report. The following outlines the specific information gathered during the RI for each medium of concern.

3.1.1 Geological Features

The site is located in the Hudson Lowlands Physiographic province of New York State, within the floodplain of the Mohawk River which is approximately 1,800 feet to the north. The geology in the area of the Mohawk

River Drainage Basin consists of unconsolidated sediments of glacio-fluvial and alluvial origin overlying bedrock of the Utica Shale Formation. The unconsolidated deposits in the vicinity of the site are classified as a principal aquifer. Well yields in the vicinity of the site are typically between 10 and 100 gallons/minute. The regional direction of groundwater flow in the unconsolidated deposits is to the east, following the direction of flow of the Mohawk River.

3.1.2 Hydrogeologic Features

Fill ranged from 4 feet at MW-1 to 12 feet at MW-3. Beneath the fill at MW-2 and MW-4, a grey brown silt and clay unit with some to little fine to coarse sand were encountered. In boring MW-2, this unit became more granular at depth and extended to the bottom of the boring at 18.0 feet. At MW-4 the silt and clay unit changed to silt with some fine to coarse sand at a depth of 11 feet below grade. Groundwater was encountered at depths ranging from 6.1 feet at MW-1 to 9.0 feet below grade at MW-3. The primary water bearing unit is the upper interbedded silt and sand units. The average horizontal hydraulic gradient between MW-1 and MW-3 is 0.016 feet/feet. The hydraulic conductivity of the unconsolidated water bearing materials at the site, based on the field tests, is between 6.8×10^{-5} and 1.2×10^{-4} cm/sec. An estimate of the average linear velocity of groundwater flow at the site is 0.1 feet/day or 40 feet per year. The glacial till unit found beneath the upper unconsolidated layer has an estimated permeability of 7×10^{-5} cm/sec. Bedrock is found at approximately 27 feet below grade.

3.1.3 Physical Features

The most significant features which may influence groundwater flow and contaminant migration are the building foundation and the stormwater sewer system. The foundation of the building separates the Courtyard from the northern portion of the site where elevated levels of soil gas were recorded. Seasonal changes in groundwater elevations have produced changing groundwater flow patterns from north-northeast to north-northwest (Figure 3-6). Underground utilities exist upgradient of the site which include gas, water, storm sewer and sanitary sewer lines. A storm sewer system exists in the courtyard and to the east of the building, however, the direction which the storm sewer transects the site is not known.

3.1.4 Surface Water

The Mohawk River is located approximately 1,800 feet to the north of the site. No other surface water bodies exist on or near the site.

3.1.5 Contaminants

The following is a description of impacts from the disposal of hazardous waste and past practices at the Northeast Alloys and Metal Site. Based on the results of the RI in comparison to SCGs and potential for public health and environmental exposure rates, certain areas and media require remediation.

3.1.5 (a) Groundwater

Generally groundwater contamination found at the site is related to and found in proximity to the former UST and the drum spillage area in the Courtyard and downgradient of the degreaser area.

Groundwater quality standards were exceeded in 5 out of 12 wells installed on site. The highest concentrations of VOCs were found in MW-6, RW-2, RW-1, MW-5, Sump, MW-9 and MW-3, in that order. Levels of contaminants were found in the following ranges: 1,1,1-Trichloroethane(4-29,000 ppb), 1,1-Dichloroethane(35 ppb - 14,634 ppb), 1,2-Dichloroethene(28 ppb - 41,000 ppb), Trichloroethene(47 ppb - 3,900 ppb), 1,1-Dichloroethene (17 ppb - 560 ppb), and Vinyl Chloride (11 ppb - 280 ppb).

Groundwater contamination near the east gate, at MW-9 was found to be 47 ppb for TCE and 199 ppb for 1,2-DCE.

Groundwater contained elevated levels of metals which include aluminum, antimony, arsenic, calcium, chromium, cobalt, iron, magnesium, and vanadium. However, given the historic use as a scrap yard, the elevated levels of metals are not unexpected. The highest levels of metals found in the groundwater at MW-2 were located at the old scrap storage area.

RW-1 had a significant level of sodium, however, it was determined that the drillers put salt in the well to melt ice. This would account for this unusually high level. Other levels of sodium found at the site are within normal limits.

Semi-volatile organic compounds (SVOC) were not prevalent at the site. Only MW-6 and RW-1 contained estimated levels of Bis (2-Ethylhexyl) phthalate (80 ppb), Benzo(a) anthracene (2 ppb) and Chrysene (2 ppb).

No PCBs were detected in site groundwater or soils.

There are no known users of groundwater within a 1.5 miles radius of the site and the area is serviced by a public water supply.

3.1.5 (b) Soil Gas

Previous investigations utilized soil gas to delineate VOC contamination found at the site. Sixteen soil borings were advanced to depth ranging from 1 to 4 feet below grade. Detectable levels of TCA and TCE were identified which correlated with the former drum area and the former degreaser locations. Levels ranged from ND - 780 mgg/M^3 for Trichloroethene and ND - 96 mgg/M^3. The highest concentrations were found at the same location, SG7. SG7 is just to the north of the building area where the former degreasing operation was conducted (Figure 1-4).

3.1.5 (c) Soil

As part of the RI, shallow soil samples were taken from across the site in order to determine if other areas had been effected by past practices.

Several semivolatile organics and metals were detected in the shallow soil samples in both background and on-site samples. Levels of PAHs are believed to be associated with asphalt and other roadway contaminants. Metals are also believed to be associated with the surrounding roads and historical use of the site. These semivolatiles and metals are not deemed to be a significant threat.

Soil sampling and historic soil gas sampling in the vicinity of the courtyard and down gradient of the building, indicates that an area of approximately 16,000 square feet exists which exhibits elevated levels of VOCs. Soils samples in this area exhibited total VOCs in the range of 1846 ppb to non detect. The majority of the contamination found in the soils exists just above the groundwater table which is found approximately 8-10 feet below grade.

Soil sampling conducted near the east gate have identified a small area contaminated with Trichloroethene (8,200 ppb to 790 ppb), Benzo (a) anthracene (570 ppb), Benzo (a) pyrene (570 ppb) and Chrysene (630 ppb). Approximately 200 cubic yards of soils are believed to be contaminated above cleanup goals.

Downgradient wells and soil samples confirm that the contamination has not migrated to other areas.

3.1.5 (d) Air

Soil sampling and screening for the preliminary organic compounds of concern have not indicated the presence of target compounds at measurable levels near the surface of the site and, therefore, airborne contamination, measured in the breathing zone, is not anticipated.

3.2 Summary of Human Exposure Pathways:

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

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

Completed pathways which are known to, or may, exist at the site include ingestion and dermal contact.

There is a future potential for ingestion of contaminated groundwater. However, no potable supply wells operate on the site and the area is supplied by public water.

There is a potential for dermal contact or incidental ingestion exposures due to contaminated surface and sub-surface soils.

3.3 Summary of Environmental Exposure Pathways:

Because the site is fully developed, there are few, if any, on-site ecological receptors (i.e., terrestrial flora and fauna) to be evaluated. Except for the Mohawk River to the north, surrounding areas are developed and have minimal ecological receptors. Potential risks to ecological receptors to the north would be from contaminated groundwater, however, the documented groundwater contamination is predominantly confined near the site and the Mohawk River is over 1,800 feet from the site. If left un-remediated, contaminated surface soils could enter the storm sewer system and then migrate to the Mohawk River. However, most underground utilities are upgradient of the impacted areas.

SECTION 4: ENFORCEMENT STATUS

The NYSDEC and Mrs. Joyce A. Rossi entered into a Consent Order on January 28, 1997. The Order obligated the responsible parties to develop and implement a remedial program for the Northeast Alloys Site. The remedial program includes the development and implementation of a remedial investigation/feasibility study, an interim remedial measure (if warranted) and a remedial/ remedial construction program.

Upon issuance of the Record of Decision, the remedial design/remedial construction program would be implemented.

Under a separate agreement between Mrs. Joyce A. Rossi and ELG Haniel Trading's, the environmental consulting firm of Civil and Environmental Consultants Inc., was procured to develop and implement the required programs.

SECTION 5: SUMMARY OF THE REMEDIATION GOALS

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. The overall remedial goal is to meet all Standards, Criteria, and Guidance (SCGs) and be protective of human health and the environment.

At a minimum, the remedy selected should eliminate or mitigate all significant threats to the public health and to the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

The goals selected for this site are:

- Reduce, control, or eliminate, to the extent practicable, the contaminated soil present 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 to the extent practicable.

SECTION 6: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy should be protective of human health and the environment, be cost effective, comply with other statutory laws and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. Potential remedial alternatives for the Northeast Alloys and Metal Site were identified, screened and evaluated in a feasibility study. This evaluation is presented in the report entitled "Remedial Investigation/Feasibility Study", dated February 12, 1998.

A summary of the detailed analysis follows. As used in the following text, the time to implement reflects only the time required to implement the remedy, and does not include the time required to design the remedy, procure contracts for design and construction.

6.1: Description of Alternatives

Potential remedial alternatives for the Northeast Alloys and Metals Site were identified, screened and evaluated in a three phase feasibility study. This evaluation is presented in the report entitled "Remedial Investigation/Feasibility Study".

It is proposed, as part of each alternative, that contaminated soils in the vicinity of the east gate would be excavated for off site disposal in order to meet soil cleanup objectives. Approximately 200 cubic yards of soils would require excavation and disposal at an estimated cost of $ 60,000. This would return this small area to unrestricted use.

The following alternatives address the groundwater and remaining soil contamination found in the vicinity of the on-site building. A summary of the detailed analysis follows.

Alternative #1
No Action

The No Action Alternative is typically evaluated as a procedural requirement and as a basis for comparison. It requires continued monitoring only, allowing the site to remain in an unremediated state. This Alternative would leave the site in its present condition and would not provide any additional protection to human health and the environment.

A groundwater monitoring program would be developed to track the contaminated groundwater trends and movement. A deed restriction would be placed on the site to prevent future use of on-site groundwater and to limit contact with contaminated soils. A security fence would be erected and maintained.

Present Worth:	$ 138,000
Capital Costs:	$ 10,000
Annual O&M:	$ 8,000
Time to implement	3 months

Alternative #2
Groundwater Extraction and Treatment

This Alternative includes the extraction of groundwater using well points and treatment on site prior to disposal at the Publicly Owned Treatment Work (POTW). A monitoring and maintenance program would be developed to insure that the groundwater system was operating effectively, and to monitor contaminated groundwater to insure that levels of VOCs were being reduced and that off site migration was mitigated. The anticipated length of time required to remediate the site is ten (10) years.

Present Worth:	$ 291,000
Capital Costs for Groundwater and Soil:	$ 104,000
Annual O&M:	$ 24,000
Time to implement	6 - 12 months

Alternative #3
Groundwater Extraction and Treatment with Soil Vapor Extraction

This Alternative is the same as Alternative #2, except that vapor extraction will also be performed in RW-1 and RW-2 to enhance remediation. The combined groundwater extraction and soil vapor extraction system would enhance contaminant mass removal from the impacted area. The anticipated length of time required to remediate the site is six (6) years.

Present Worth:	$ 254,000
Capital Costs for Groundwater and Soil:	$ 117,000
Annual O&M:	$ 27,000
Time to implement	6 - 12 months

6.2 Evaluation of Remedial Alternatives

The criteria used to compare the potential remedial alternatives are defined in the regulation that directs the remediation of inactive hazardous waste sites in New York State (6NYCRR Part 375). For each of the criteria, a brief description is provided followed by an evaluation of the alternatives against that criterion. A detailed discussion of the evaluation criteria and comparative analysis is contained in the Feasibility Study. The first two evaluation criteria are termed threshold criteria and must be satisfied in order for an alternative to be considered for selection. The last five evaluation criteria are termed "primary balancing criteria" and are used to compare the positive and negative aspects of each of the remedial strategies.

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

Alternative #1 would not meet SCGs for groundwater or soils because the contaminated materials would be allowed to stay in place and exceed standards and guidance values. Contaminated materials could continue to migrate and impact off site receptors.

Alternatives #2 and Alternative #3 would meet SCGs for groundwater over time. These alternatives both include the removal of contaminated groundwater from the site, therefore SCGs for groundwater would be obtained eventually. Alternative #3, which includes the soil vapor extraction, would most likely obtain SCGs for soils as well.

2. Protection of Human Health and the Environment. This criterion is an overall evaluation of the health and environmental impacts to assess whether each alternative is protective.

Alternative #1 would not be considered to be protective of human health and the environment since site related contamination above cleanup goals would remain in-place and would continue to impact groundwater and migrate off-site.

Alternative #2 is considered to be protective of human health and the environment due to the active removal of contaminated water from the site.

Alternative #3 is considered to be the most protective of human health and the environment due to the aggressive remediation of both contaminated groundwater and soils.

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

Alternative #1 would not cause any short-term impacts due to the lack of disturbance of the site and it would take the least time to implement.

The remaining two alternatives could create potential short term impacts to workers and the public from the installation of remedial systems and the exposure to contaminated groundwater and soils. However, these impacts would be mitigated by implementing readily available safety procedures, including air monitoring, the wearing of protective equipment, decontamination of equipment prior to leaving the site, and implementation of engineering controls which may include, but are not limited to covering soils, installing migration barriers to keep contaminants from migrating beyond the work site boundaries, and the use of dust suppression techniques. Alternatives # 2 and # 3 are considered to have the same level of short-term impacts and are considered to take approximately the same time to implement.

4. Long-term Effectiveness and Permanence. This criteria evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the controls intended to limit the risk, and 3) the reliability of these controls.

Alternative #1 would not provide long-term effectiveness or permanence because contamination would remain in place.

Alternative #2 would provide a higher degree of long-term effectiveness and permanence because contaminated groundwater would be actively collected and treated.

Alternative #3 would provide the highest level of long-term effectiveness and permanence because both contaminated groundwater and contaminated soil gas would be actively removed from the site and treated.

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

Alternative #1 would provide no reduction in toxicity, mobility or volume as it pertains to contaminated wastes or media.

Alternative #2 would provide a higher degree of reduction compared to Alternative #1.

Alternative #3 is considered to provide the highest degree of reduction based upon the quantity of contaminated mass which will be removed from the groundwater and the soil.

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.

The No Action Alternative would be considered to be implementable.

Alternatives #2 and #3 are also considered to be the implementable overall, because standard construction and administrative techniques would be utilized.

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 criteria 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

8. Community Acceptance - Concerns of the community regarding the RI/FS reports and the Proposed Remedial Action Plan are evaluated. A "Responsiveness Summary" included in Appendix C presents the public comments received and the Department's responses to the concerns. In general the public comments received were supportive of the selected remedy. The Attorney representing ELG Haniel Metal Corporation filed comments from the Law Office of Cohen & Grigsby, P.C.. These comments overall pertained to the Department's preference to have a small area of contaminated soil near the east gate removed. ELG Haniel Metal Corporation has never supported doing work in this area and believe that there is no reason to remove contaminated soils which are in exceedance of the Department's soil cleanup goals and which has caused violations of groundwater quality. The Department has provided the response to these comments in the Responsiveness Summary. The Comments have note caused a change in the Department's selected Remedy.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

Based upon the results of the RI/FS, and the evaluation presented in Section 7, the NYSDEC is selecting Alternative #3, along with removal of contaminated soil near the east gate, as the remedy for this site.

The elements of the proposed remedy are as follows:

1. Installation of a groundwater collection and treatment system based on the remedial design program. The groundwater collection and treatment system will treat contaminated water in order to discharge to an on site infiltration system.

2. Installation of a soil vapor extraction system at RW-1 and RW-2.

3. Excavate contaminated soil in the vicinity of MW # 9 to meet soil clean up goals.

4. Implementation of a site-wide operation, monitoring and maintenance program to insure that the remedial program is effective and remedial action goals are obtained.

5. Institutional controls such as deed restrictions on groundwater use will be implemented until groundwater standards are obtained.

6. The remedial design will 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 RI/FS will be resolved. This will include the determination of the size, location and number of groundwater and soil vapor extraction wells.

The estimated present worth cost to implement the remedy is $254,000. The cost to construct the remedy is estimated to be $117,000 and the estimated average annual operation and maintenance cost for 6 years is $27,000.

The following is the basis for the Department's proposal:

- The removal of contaminated soils near the east gate will remove the source of contamination which has impacted groundwater in the vicinity of MW #9 and return the entrance roadway to unrestricted use.

- The installation of a groundwater collection and treatment system will meet SCGs for groundwater within an acceptable time frame.

- The installation of a soil vacuum extraction system will facilitate the remediation of the site and will expedite the attainment of SCGs and remedial goals.

- The monitoring and maintenance of the systems and groundwater at the site will insure a successful remediation.

SECTION 8: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the Northeast Alloys and Metals Site remediation process, a number of Citizen Participation (CP) 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 interest parties.

- A public meeting was held to discuss the characteristics of the site and the proposed remedy, and to answer any questions raised.

- A "Responsiveness Summary" was prepared to address the comments received during the public comment period for the PRAP.

APPENDIX A
TABLES

Appendix A - Table 1
New York State Standards, Criteria and Guidance Applications

U.S. Environmental Protection Agency (EPA)
- Toxic Substance Control Act (TSCA)
- USEPA Health Based Soil Criteria for Systemic Toxicant and Carcinogens

New York State Department of Environmental Conservation (NYSDEC)

NYSDEC - Division of Environmental Remediation
- 6NYCRR Part 375-Inactive Hazardous Waste Disposal Site Remedial Program

Hazardous Waste Technical and Administrative Guidance Memoranda (TAGMs)
- TAGM 4030 - Selection of Remedial Actions at Inactive Hazardous Waste Sites
- TAGM 4046 - Determination of Soil Cleanup Objectives and Cleanup Levels
- TAGM 4031 - Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites

NYSDEC - Division of Hazardous Substance Regulations
- 6NYCRR Part 370 - Hazardous Waste Management System - General
- 6NYCRR Part 371 - Identification and Listing of Hazardous Wastes
- 6NYCRR Part 372 - Hazardous Waste Manifest System and Related Standards for Generators, Transporter, and Facilities
- 6NYCRR Part 376 - Land Disposal Restrictions

NYSDEC - Division of Solid Waste
- 6NYCRR Part 360 - Solid Waste Management Facilities
- 6NYCRR Part 364 - Waste Transporters Permits

NYSDEC - Division of Water
- 6NYCRR Part 700-705 - Water Quality Regulations for Surface Water and Groundwater
- 6NYCRR Part 750-757 - Implementation of NYPDES in New York State
- Technical and Operation Guidelines (TOGS) 1.1.1-Ambient Water Quality Standards and Guidance Values

NYSDEC - Division of Spill Management
- STARS Memo # 1: Petroleum-Contaminated Soil Guidance Policy
- State Navigation Law - Article 12 (Oil Spill Prevention, Control and Compensation)

NYSDEC - Division of Fish and Wildlife
- Technical Guidance for Screening Contaminated Sediments (Nov 1993)

New York State Department of Labor
- 12 NYCRR Part 56-Asbestos

Occupational Safety and Health Administration
- 29 CFR 1900-1999

Appendix A - Table 2
Representative Contamination Summary

Medium	Class	Contaminant of Concern	Concentration Range	Frequency of Exceedances	SCG *
Groundwater (Shallow)	Volatile Organic Compounds	1,1,1-Trichloroethane	Non Detect - 29,000 ppb	9 out of 32	5 ppb
		1,1,2-Trichloroethane	Non Detect - 19 ppb	2 out of 32	5 ppb
		1,1-Dichloroethane	Non Detect - 14,634 ppb	9 out of 32	5 ppb
		1,1-Dichloroethene	Non Detect - 560 ppb	6 out of 32	5 ppb
		1,2-Dichloroethane	Non Detect - 37,000 ppb	5 out of 32	5 ppb
		1,2-Dichloroethene	Non Detect - 41,000 ppb	10 out of 32	5 ppb
		Trichloroethene	Non Detect - 2100 J ppb	11 out of 32	5 ppb
		Vinyl Chloride	Non Detect - 280 J ppb	8 out of 32	2 ppb
	Semi Volatile Organic Compounds	Bis(2-Ethylhexyl) phthalate	Non Detect - 80 J ppb	1 out of 11	50 ppb
		Benzo(a)anthracene	Non Detect - 2 J ppb	1 out of 11	.002 ppb
		Chrysene	Non Detect - 2 J ppb	1 out of 11	.002 ppb
	Metals	Antimony	Non Detect - 17.8 J ppb	2 out of 13	3 ppb
		Arsenic	Non Detect - 70.4 ppb	4 out of 13	25 ppb
		Beryllium	Non Detect - 5.73 ppb	3 out of 13	3 ppb
		Chromium	Non Detect - 202 J ppb	3 out of 13	50 ppb
		Copper	Non Detect - 703 J ppb	2 out of 13	200 ppb
		Lead	Non Detect - 1740 R ppb	3 out of 13	25 ppb
		Manganese	642 ppb - 230,000 ppb	13 out of 13	300 ppb
		Mercury	Non Detect - 3.9 ppb	1 out of 13	2 ppb
		Sodium	1250 ppb - 201,000	6 out of 13	20,000 ppb
		Zinc	36.2 ppb - 571 J ppb	3 out of 13	300 ppb
Soils	Volatile Organic Compounds	Acetone	ND - 1700 J ppb	3 out of 15	200 ppb
		Trichlorocthene	ND - 8200 J ppb	3 out of 15	700 ppb
		1,2-Dichloroethene	ND - 190 ppb	1 out of 11	100 ppb
	Semi Volatile Organic Compounds	Benzo(a)anthracene	Non Detect - 570 ppb	3 out of 5	224 ppb or MDL
		Chrysene	Non Detect - 430 ppb	1 out of 5	400 ppb
		Benzo(a)pyrene	Non Detect - 570 ppb	3 out of 5	61 ppb or MDL
		Benz(a,h)anthracene	Non Detect - 1,200 ppb	2 out of 17	14 ppb or MDL

Appendix A - Table 2
Representative Contamination Summary

Medium	Class	Contaminant of Concern	Concentration Range	Frequency of Exceedances	SCG *
	Metals	Aluminum	Non Detect - 0.66 ppm	1 out of 5	0.16 ppm
		Beryllium	Non Detect - 33 ppm	1 out of 5	30 ppm
		Copper	6.6 ppm - 149 ppm	3 out of 5	25 ppm
		Iron	6,870 ppm - 47,000 ppm	1 out of 5	21,000 ppm

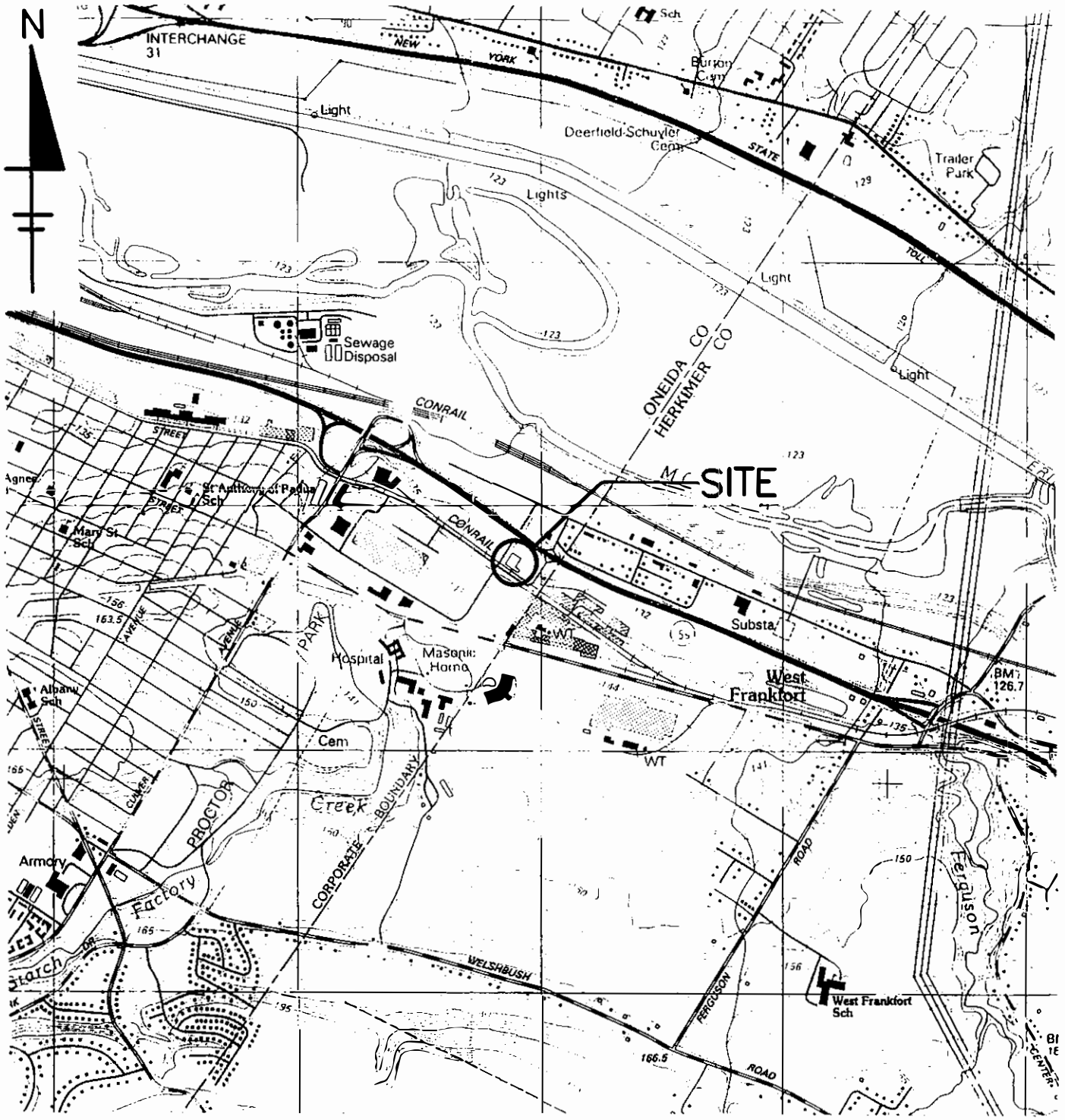
* SCG's for groundwater is standard in 6 NYCRR PART 703
SCG's for soil is objectives in NYSDEC TAGM 4046
SCG's for metals in soil are based on average site background

Appendix A - Table 3
Northeast Alloys and Metals
Remedial Alternative Costs

Remedial Alternative	Capital Costs	Annual O&M	Total Present Worth
Alternative # 1 No Action	$ 10,000.00	$ 8,000.00	$ 138,000.00
Alternative # 2 Groundwater Extraction and Treatment & Soil Removal	$ 104,000.00	$ 24,000.00	$ 291,000.00
Alternative # 3 Groundwater Extraction and Treatment and Soil Vacuum Extraction & Soil Removal	$ 117,000.00	$ 27,000.00	$ 254,000.00

Note: Present Worth Value is based upon a 5 % Present Work Factor using continuous compounding.

APPENDIX B
FIGURES



REFERENCE:
U.S.G.S. 7.5' TOPOGRAPHIC MAP UTICA QUADRANGLE NEW YORK, DATED: 1983, SCALE: 1"=2000', CONTOURS AND ELEVATIONS IN METERS.

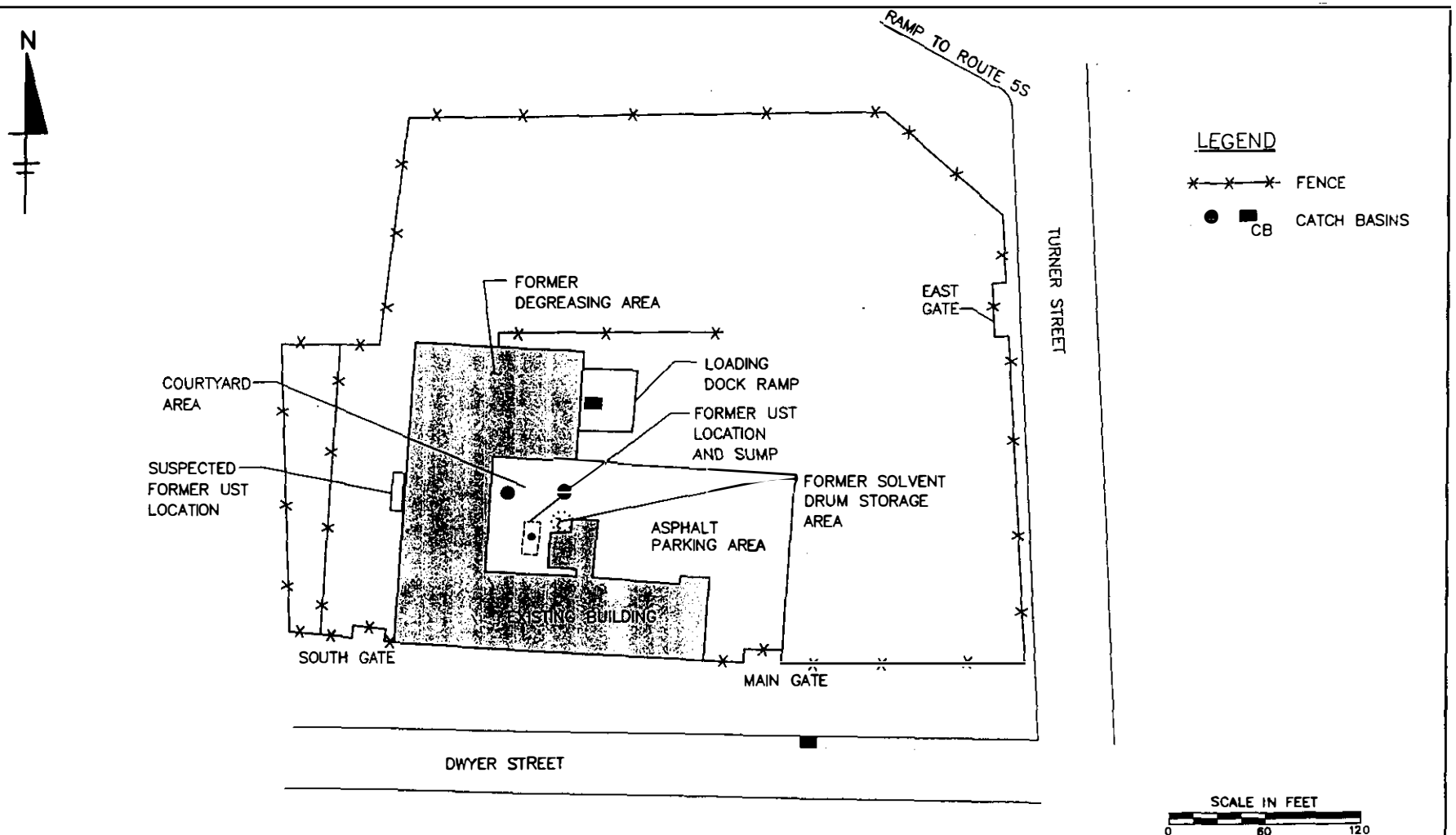
SCALE IN FEET
0 2000 4000

Civil & Environmental Consultants, Inc.
Pittsburgh, PA
(412) 921-3402 • (800) 365-2324
Cincinnati, OH (513) 985-0226 • (800) 759-5614
Cleveland, OH (412) 963-1063 • (800) 494-0252

SITE LOCATION
RI/FS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

DWN. BY: M.T.M.	ACAD FILE:	SCALE:	DATE:		
CHKD. BY:	94502F11	1"=2000'	4/1/97	94502	FIGURE 1-1

G:\PROJECTS\94502\DWG\94502F11.DWG (M. MARKS) - APR 02, 1997 - 09:42:50



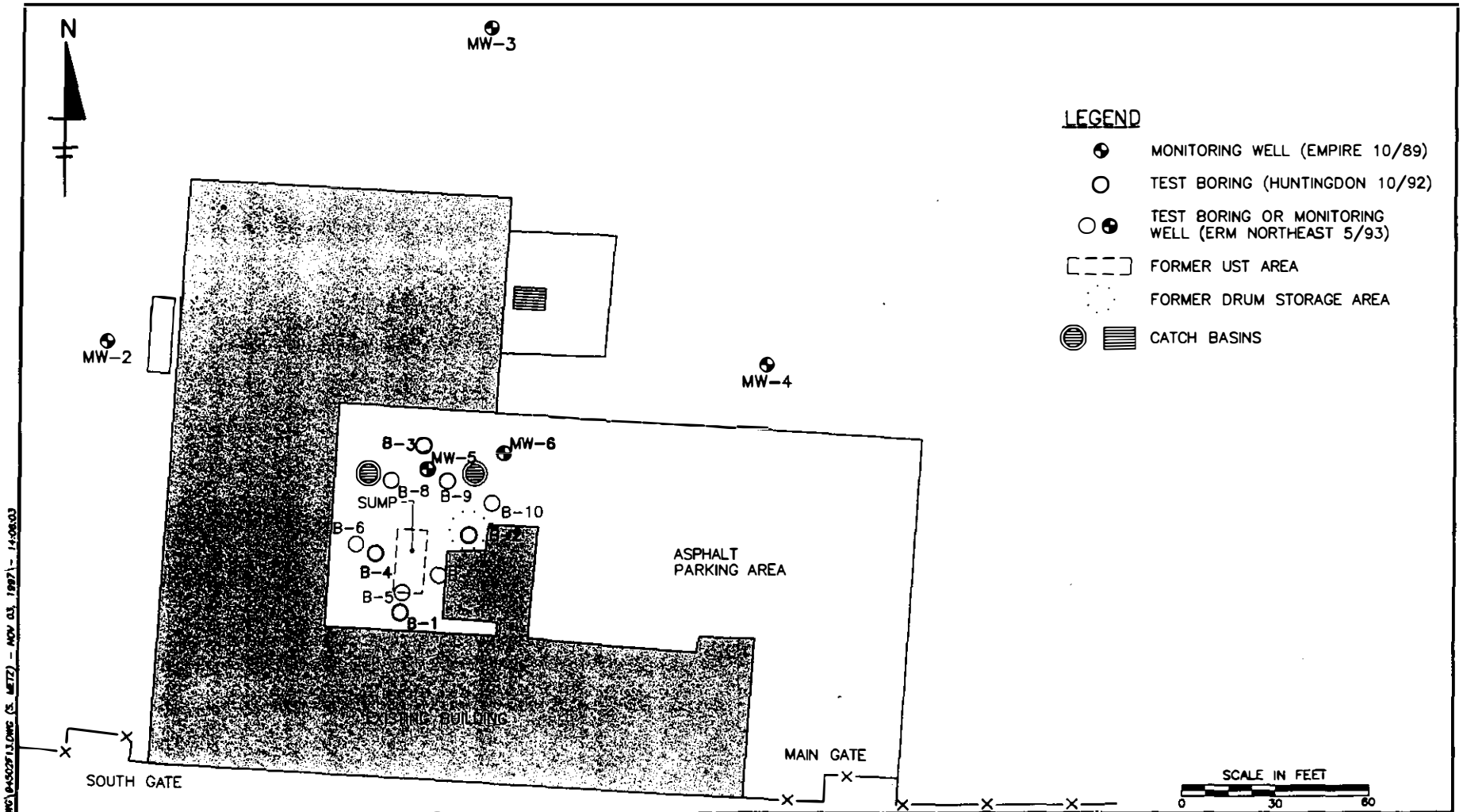
REFERENCE:
ERM NORTHEAST, SOIL AND GROUNDWATER INVESTIGATION AT THE FORMER NORTHEAST ALLOYS & METALS SITE, MAY 1993.

G:\PROJECTS\94502\DWG\94502RF2.DWG (M. MARCS) - APR 08, 1997 - 11:20:50

CEC
Civil & Environmental Consultants, Inc.
Pittsburgh, PA (412) 921-3402 • (800) 365-2324
Cincinnati, OH (513) 985-0226 • (800) 756-8614

SITE LAYOUT
RI/FS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

DWN. BY: M.T.M.	ACAD FILE: 94502RF2	SCALE: 1"=60'	DATE: 4/1/97	94502	FIGURE 1-2
CHKD. BY: TAV					



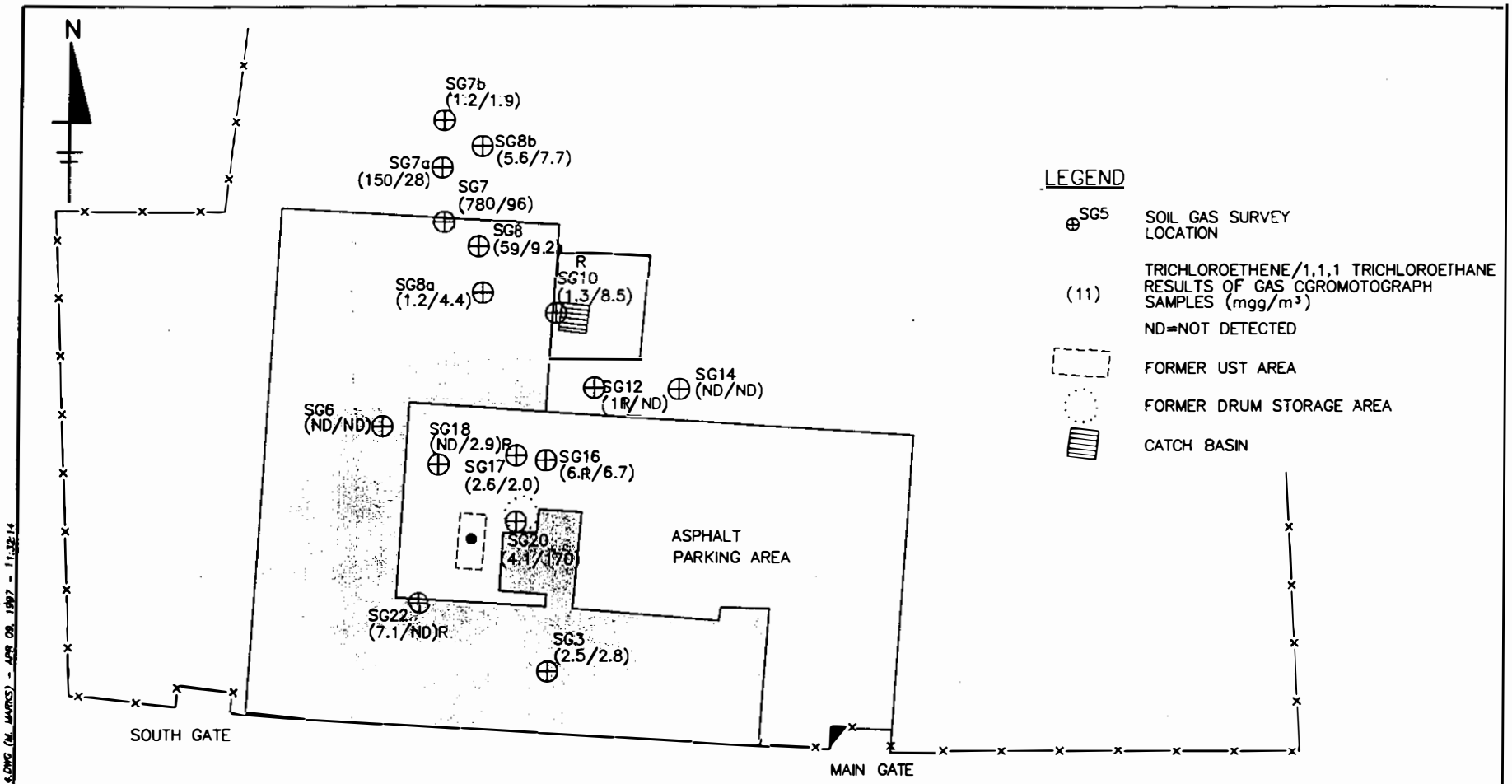
REFERENCE:
BASE MAP FROM HUNTINGDON EMPIRE SOILS INVESTIGATIONS, INC. ENVIRONMENTAL INVESTIGATION, FORMER NORTHEAST METALS SITE, OCTOBER 1992.

Civil & Environmental Consultants, Inc.
Pittsburgh, PA (412) 921-3402 • (800) 365-2334
Cincinnati, OH (513) 985-0226 • (800) 759-5614

BORING AND MONITORING WELL LOCATIONS
FROM PREVIOUS INVESTIGATIONS
RI/FS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

DWN. BY:	ACAD FILE:	SCALE:	DATE:		
M.T.M.	94502F13	1"=30'	4/1/97	94502	FIGURE 1-3

G:\PROJECTS\94502\DWG\94502F13.DWG (S. METZ) - NOV 03, 1997 - 14:06:03



REFERENCE:
HARRESS PICKEL CONSULTANTS, SOIL GAS & GROUNDWATER INVESTIGATION AT THE FORMER NORTHEAST ALLOYS & METALS SITE, DECEMBER 1993.

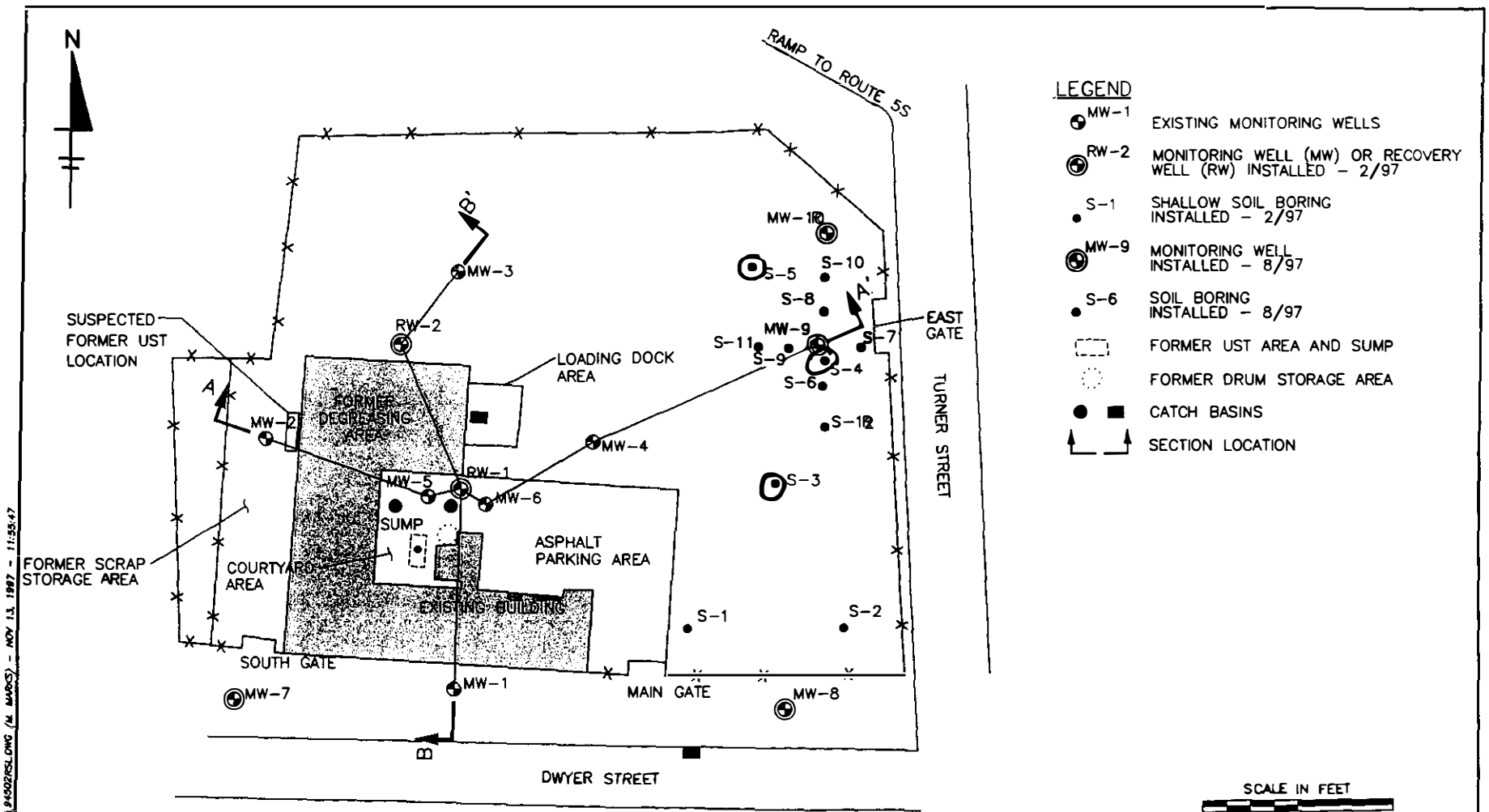
G:\PROJECTS\94502\DWG\94502F14.DWG (M. HARRIS) - APR 08, 1997 - 11:32:14

Civil & Environmental Consultants, Inc.
Pittsburgh, PA (412) 921-3402 • (800) 365-2324
Cincinnati, OH (513) 985-0226 • (800) 759-5814

DWN. BY: M.T.M.	ACAD FILE: 94502F14	SCALE: 1"=40'
CHKD. BY:		

RESULTS OF HPC SOIL GAS SURVEY
RI/FS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

DATE: 4/3/97	94502	FIGURE 1-4



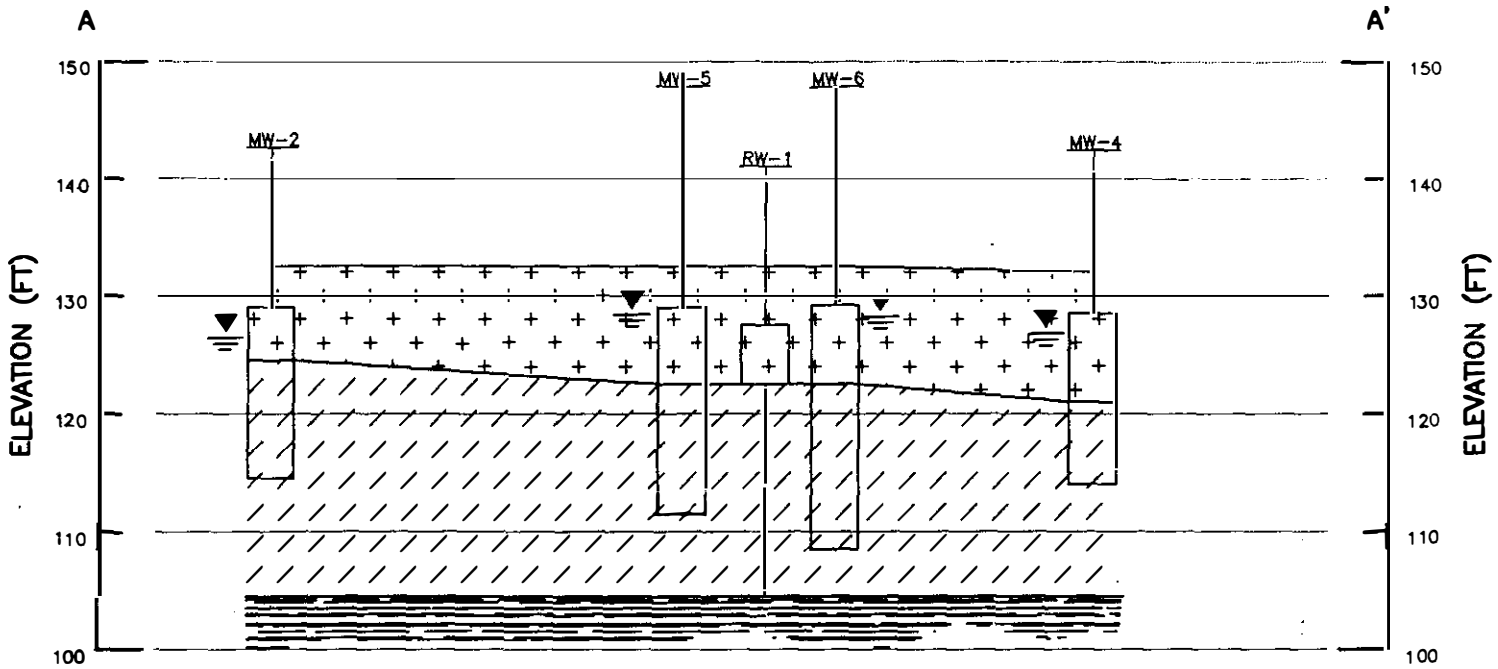
G:\PROJECTS\94502\DWG\94502RSL.DWG (M. MARCS) - NOV 13, 1997 - 11:55:47

REFERENCE:
BASE MAP FROM ERM - NORTHEAST, SOIL AND GROUNDWATER INVESTIGATION AT THE FORMER NORTHEAST ALLOYS & METALS SITE, MAY 1993.

Civil & Environmental Consultants, Inc.
Pittsburgh, PA (412) 921-3402 • (800) 365-2324
Cincinnati, OH (513) 469-2228 • (800) 759-5614

SOIL BORING AND WELL INSTALLATION PLAN
RI/FS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

DWN. BY: M.T.M.	ACAD FILE: 94502RSL	SCALE: 1"=60'	DATE: 10/21/97	94502	FIGURE 2-1
CHKD. BY:					



LEGEND

- FILL BROWN, BLACK, GRAY SILTY AND FIRM SAND SOME CLAY TRACE ROCK FRAGMENTS, BRICK AND WOOD
- TILL BLACK, DARK GRAY, BROWN SILT SOME FINE SAND AND CLAY TRACE ROUND TO ANGULAR ROCK FRAGMENTS
- SHALE BLACK (UTICA SHALE)
- MONITORING WELL AND SCREEN INTERVAL
- WATER LEVEL ELEVATION

GEOLOGIC CONDITIONS

THE BORING LOGS AND RELATED INFORMATION PRESENTED IN THIS REPORT DEPICT SUBSURFACE CONDITIONS AT THE TEST BORING LOCATIONS AND AT THE TIME OF DRILLING. SOIL CONDITIONS AT OTHER LOCATIONS MAY DIFFER.

GEOLOGIC CORRELATIONS SHOWN BETWEEN TEST BORINGS GENERALLY ARE BASED ON STRAIGHT-LINE INTERPOLATION. ACTUAL CONDITIONS BETWEEN TEST BORINGS MAY DIFFER.

VERTICAL SCALE IN FEET
0 10 20

HORIZONTAL SCALE IN FEET
0 60 120

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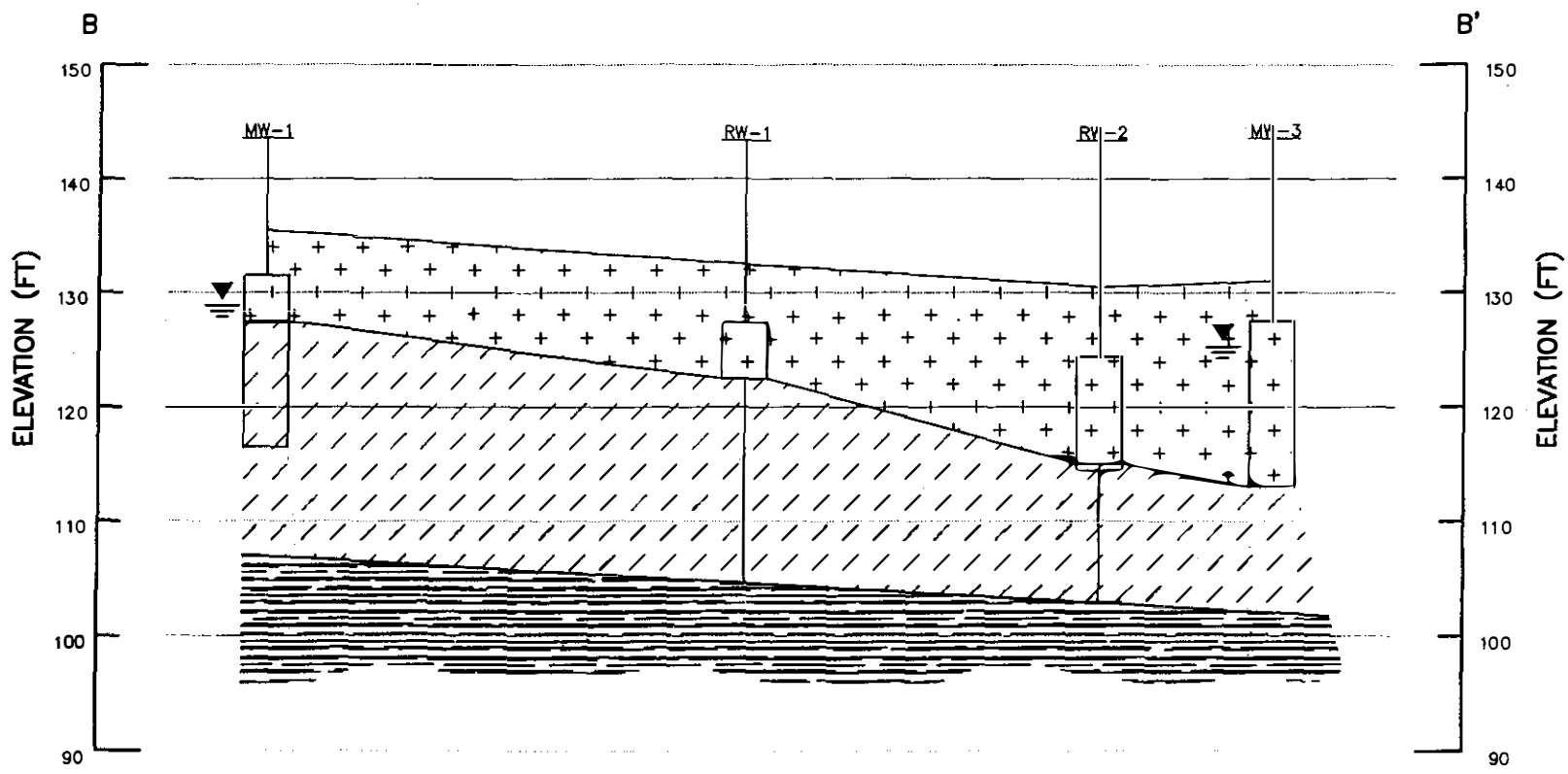
Cincinnati, OH (513) 985-4200 • (800) 759-5414

DWN. BY: M.T.M.
CHKD. BY: KJV
ACAD FILE: 94502AA
SCALE: AS NOTED

CROSS SECTION A-A'
RI/FS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

DATE: 4/2/97 | 94502 | FIGURE 3-1

G:\PROJECTS\94502\DWG\94502ALONG (B. HENACK) - APR 23, 1997 - 17:43:50



LEGEND

- FILL BROWN, BLACK, GRAY SILTY AND FIRM SAND SOME CLAY TRACE ROCK FRAGMENTS, BRICK AND WOOD
- TILL BLACK, DARK GRAY, BROWN SILT SOME FINE SAND AND CLAY TRACE ROUND TO ANGULAR ROCK FRAGMENTS
- SHALE BLACK (UTICA SHALE)
- MONITORING WELL AND SCREEN INTERVAL
- WATER LEVEL ELEVATION

GEOLOGIC CONDITIONS

THE BORING LOGS AND RELATED INFORMATION PRESENTED IN THIS REPORT DEPICT SUBSURFACE CONDITIONS AT THE TEST BORING LOCATIONS AND AT THE TIME OF DRILLING. SOIL CONDITIONS AT OTHER LOCATIONS MAY DIFFER.

GEOLOGIC CORRELATIONS SHOWN BETWEEN TEST BORINGS GENERALLY ARE BASED ON STRAIGHT-LINE INTERPOLATION. ACTUAL CONDITIONS BETWEEN TEST BORINGS MAY DIFFER.

VERTICAL SCALE IN FEET
0 10 20

HORIZONTAL SCALE IN FEET
0 60 120

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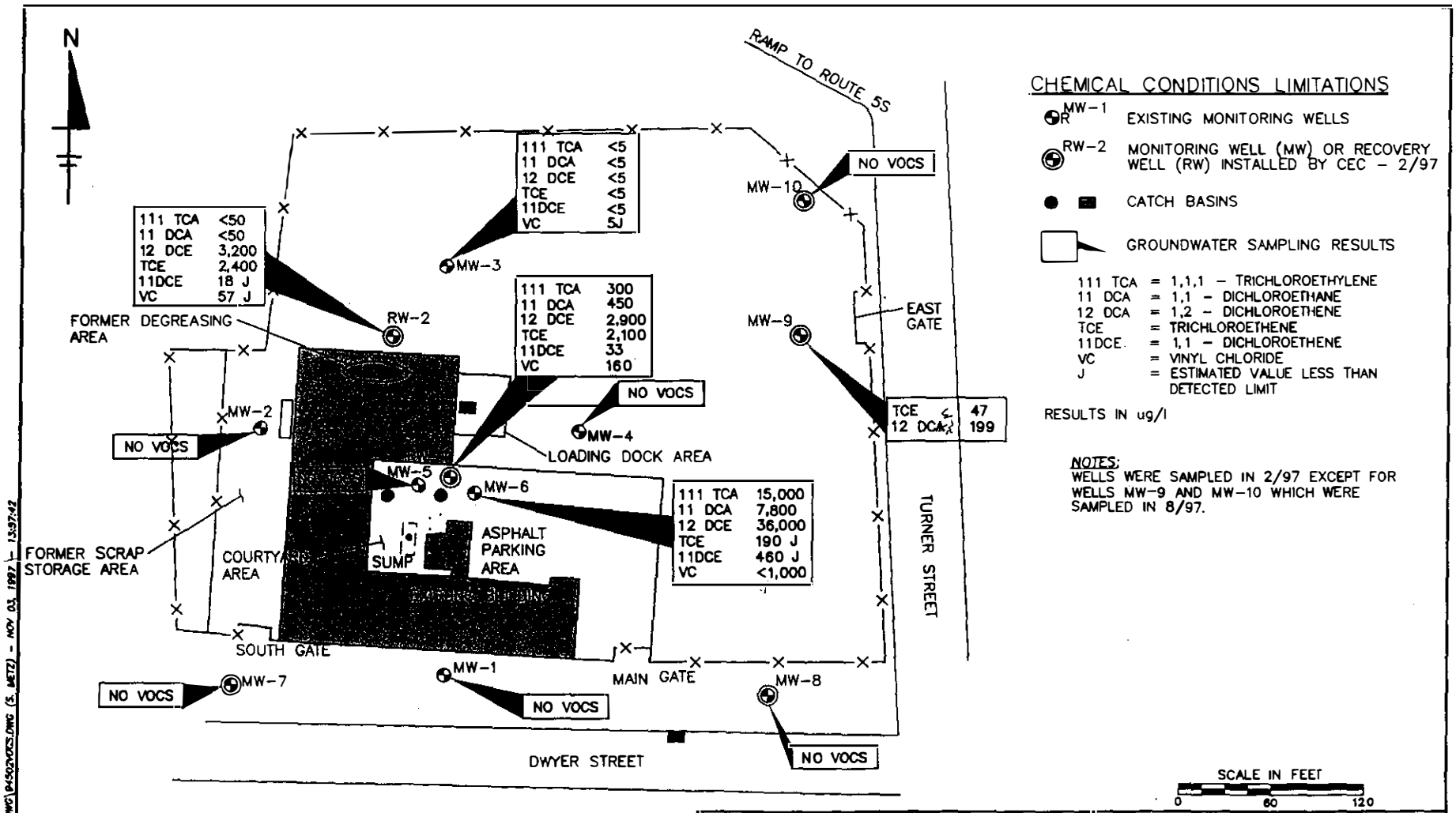
CROSS SECTION B-B'
RI/FS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

DWN. BY: M.T.M.	ACAD FILE: 94502B8	SCALE: AS NOTED	DATE: 4/2/97	94502	FIGURE 3-2
CHKD. BY: TMU					



CHEMICAL CONDITIONS LIMITATIONS

- MW-1 — EXISTING MONITORING WELLS
- RW-2 — MONITORING WELL (MW) OR RECOVERY WELL (RW) INSTALLED BY CEC – 2/97
- CATCH BASINS
- GROUNDWATER SAMPLING RESULTS

111 TCA = 1,1,1 – TRICHLOROETHYLENE
11 DCA = 1,1 – DICHLOROETHANE
12 DCA = 1,2 – DICHLOROETHENE
TCE = TRICHLOROETHENE
11DCE = 1,1 – DICHLOROETHENE
VC = VINYL CHLORIDE
J = ESTIMATED VALUE LESS THAN DETECTED LIMIT

RESULTS IN ug/l

NOTES:
WELLS WERE SAMPLED IN 2/97 EXCEPT FOR WELLS MW-9 AND MW-10 WHICH WERE SAMPLED IN 8/97.

SCALE IN FEET
0 60 120

REFERENCE:
ERM – NORTHEAST, SOIL AND GROUNDWATER INVESTIGATION AT THE FORMER NORTHEAST ALLOYS & METALS SITE, MAY 1993.

Civil & Environmental Consultants, Inc.
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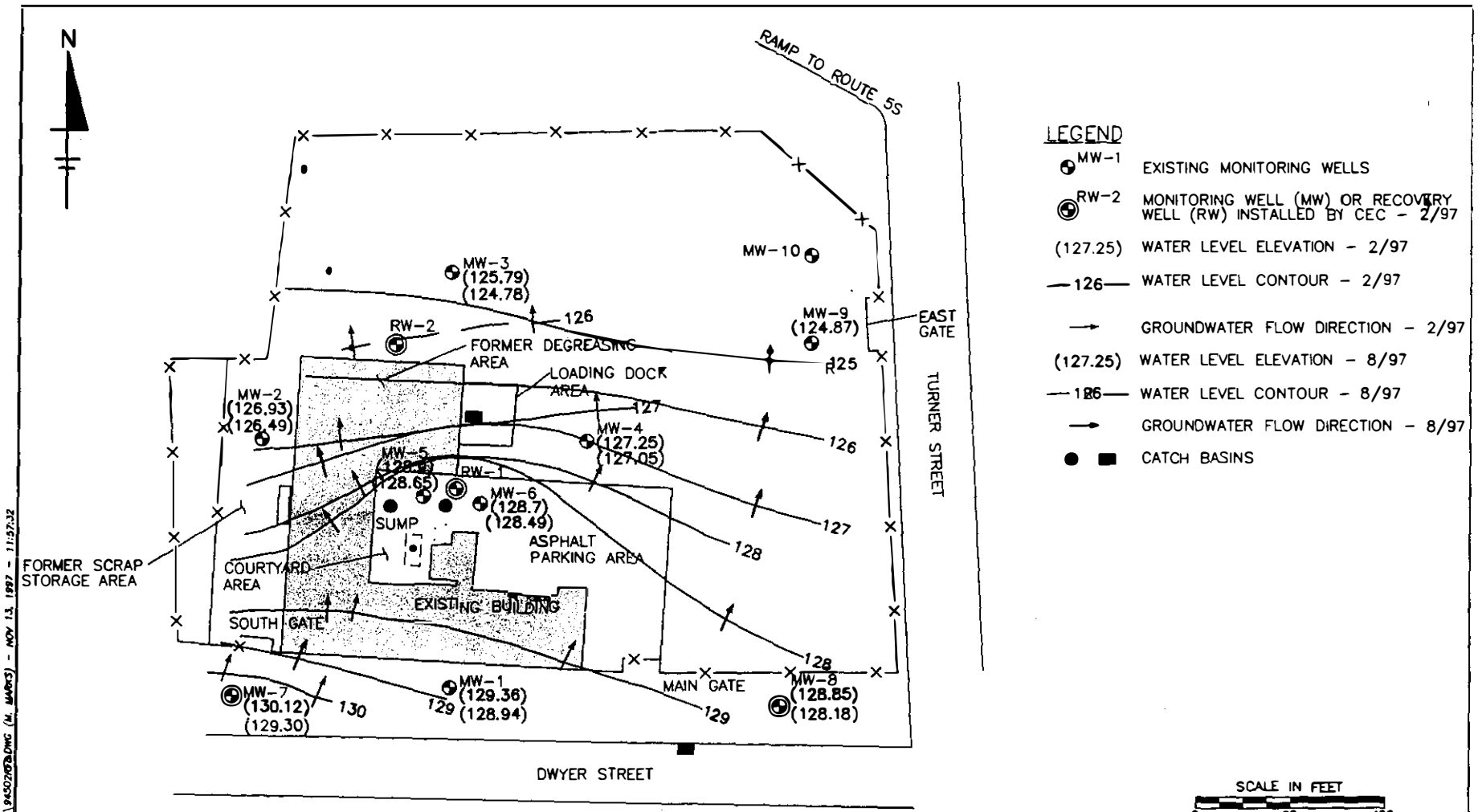
Cincinnati, OH (513) 645-0226 • (800) 759-5614

DWN. BY: R.E.P.	ACAD FILE: 94502VOCS	SCALE: 1"=60'
CHKD. BY:		

EXTENT OF VOCS IN GROUNDWATER
RI/FS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

DATE: 10/20/97	94502	FIGURE 3-4



C:\PROJECTS\94502\DWG\94502RFBLDWG (M. MARKS) - NOV 13, 1997 - 11:57:32

REFERENCE:
ERM - NORTHEAST, SOIL AND GROUNDWATER INVESTIGATION AT THE FORMER NORTHEAST ALLOYS & METALS SITE, MAY 1993.

Civil & Environmental Consultants, Inc.
Pittsburgh, PA (412) 921-3403 • (800) 365-2324
Cincinnati, OH (513) 985-0226 • (800) 759-5814

DWN. BY: M.T.M.	ACAD FILE: 94502RF8	SCALE: 1"=60'	DATE: 10/21/97	94502	FIGURE 3-6
CHKD. BY: TSV					

GROUNDWATER CONTOUR MAP
WATER LEVELS MEASURED 2/97 AND 8/97
RI/RS REPORT
NORTHEAST ALLOYS AND METALS
UTICA, NEW YORK

APPENDIX C
EXHIBITS

RESPONSIVENESS SUMMARY
NORTHEAST ALLOYS AND METALS
SITE NO. 6-33-045

The following comments were provided by Mr. Fred Tolhurst of Cohen and Grigsby, P.C. Mr. Tolhurst is the attorney representing ELG Haniel Metal Corporation.

Comment #1:

- Section 3.1: Operational/Disposal History: Northeast Alloys and Metals, Inc. removed a 10,000 gallon UST and closed the tank excavation in July 1989. At that time, a 24-inch diameter corrugated pipe was placed in the excavation cavity and soil was backfilled around the pipe. In August 1989, a water sample was collected from the pipe that was reported to contain TCE.

Response #1:

- Dates have been incorporated into the ROD.

Comment #2:

- Section 4, Current Status, The PRAP states: The presence of hazardous waste at the site presents a significant threat to human health and the environment and the site was placed on the Registry of Inactive Hazardous Waste Sites as a class "2" in 1994. Civil and Environmental Consultants, Inc. has recently completed and revised a Remedial Investigation/Feasibility Study (RI/FS), dated February 12, 1998. The conclusion that the site presents a "significant threat to human health and the environment" is unsubstantiated and seemingly contrary to the portions of the February 1998 Remedial Investigation/Feasibility Study Report ("RI/FS Report") which find that a "no action" remedial alternative (with minimal institutional controls to protect against future use of groundwater) would meet the evaluation criteria for selection of a remedy. The RI/FS Report is based on data produced by various investigations of the site. However, the data has been found not to exceed USEPA risk based concentrations for soils.

Response #2:

- This section refers to language derived from 6NYCRR Part 375, as the regulation defines significant threat. No change is required. With regard to the USEPA risk based concentrations for soils, the Department utilizes the Technical and Administrative Guidance Memorandum (TAGM) 4046 which deals with the soil cleanup objectives and levels. The USEPA Risk Based concentrations for soils was not identified as a SCG during the RI/FS process. On page 56 of the RI/FS TAGM 4046 is identified as the SCG considered for the comparison of contaminated soils to soil cleanup goals. This section does not consider the USEPA risked based level, nor does it discuss the highest levels of

VOC which were identified in this area. Soil samples taken at S-4 exhibited Trichloroethene (TCE) at 8200 ppb. The language on page 56 only discusses TCE at 47 ppb. The Department did take into consideration the highest levels of contamination and utilized the most stringent SCGs which were identified in the RI/FS. Subsequently the removal of these soils is required and justified. Groundwater contamination near the east gate, at MW-9 was found to be 47 ppb for TCE and 199 ppb for 1,2- DCE. The groundwater standard for TCE and DCE is 5 ppb. Levels established in TAGM 4046 are protective of groundwater quality. If levels of contamination are found above TAGM goals, then removal is required.

Comment #3:

- Section 4.1: Summary of the Remedial Investigation, the PRAP states: Based upon the results of the remedial investigation in comparison to the SCGs and potential public health and environmental exposure routes, certain areas of the site require remediation. With regard to the East Gate Area, DEC's conclusion in the PRAP identifies no specific public health and environmental exposure routes and offers no support for the conclusion that the "east gate area" requires remediation. In contrast, the RI/FS Report forms exactly the contrary conclusion! Namely, based on comparison to EPA risk based standards and limited impacts to on-site groundwater, the RI/FS Report concludes that the area by the east gate does not require remediation. (RI/FS Report, pp. 56-58)

Response #3:

- The Department believes that this is an isolated area TAGM 4046 Soil Cleanup Objectives and Cleanup goals have been exceeded. In addition, NYS water quality standards have been exceeded. The NYSDOH is concerned with the volatile organic compounds being located in surficial soils and near the main entrance road and gate. These soils may come into contact with site workers and visitors as well as truck and foot traffic. If the soils are to remain in place, they would need to be covered and monitored until dissipated. This approach is unacceptable, because further groundwater contamination may occur and the area of contamination could grow. Please see comments previously made under Response # 2.

Comment #4:

- Section 6: Summary of the Remediation Goals, the PRAP states: The goals selected for this site are: Provide for attainment of SCGs for groundwater quality to the extent practicable. Mitigate the impacts of contaminated groundwater to the environment. Reduce, control, or eliminate, to the extent practicable, the contaminated soil present on site. Eliminate the potential for direct human or animal contact with the contaminated soils on site. The remediation goals stated in the PRAP are materially different from the remediation goals that are stated in the RI/FS Report that DEC has already approved.

(RI/FS Report, p. 70.) In the RI/FS Report, the remediation goals are directed to protection of groundwater that may be affected by on-site contamination and thus elimination of exposure pathways to contaminated soil for humans and animals. The PRAP has extended those goals to further include the goal to "reduce, control, or eliminate, to the extent practicable, the contaminated soil present on-site." This focus on contaminated soils, irrespective of whether such soils present a significant threat to human health and the environment, is unnecessary and unwarranted.

Response #4:

- The above language has been included because the Department believes that the contaminated soils require remediation and present a significant environmental threat due to the exceedance of groundwater standards. The TAGM 4046 soil cleanup goals are based on the protectiveness of groundwater. If concentrations of hazardous substances exceed a given threshold, the potential for groundwater quality to be adversely impacted does exist. As shown in the RI, both soil cleanup goals and groundwater standards have been exceeded. Therefore, by removing the contaminated soils, groundwater quality will improve and the area can be returned to unrestricted use, as it pertains to the soils.

Comment # 5:

- Section 7.1: Description of Alternatives, the PRAP states: It is proposed, as part of each alternative, that contaminated soils in the vicinity of the east gate would be excavated for off site disposal in order to meet soil cleanup objectives. Approximately 200 cubic yards of soils would require excavation and disposal at an estimated cost of $60,000. This would return this small area to unrestricted use. DEC's proposal for excavation in the east gate area is not supported by the RI/FS Report. On the contrary, the RI/FS specifically considered the minor contamination in the east gate area and concluded that no action was appropriate based on the limited impact to groundwater and that the highest levels of VOCs detected in soil do not represent a human health risk (RI/FS Report, pp. 56-58). Indeed, the PRAP concedes that "downgradient wells and soil samples confirm that the contamination has not migrated to other areas [from the east gate area]" (PRAP, p. 5). Soils in the east gate area are not causing groundwater contamination that is migrating off-site and there is no risk of dermal contact with soils based on most recent EPA Guidance, "Risk Based Concentration Table," USEPA, Region 111, October 22, 1997. Accordingly, the proposal for excavation in the east gate area would not further any of the remediation goals set forth in Section 6 of the report. On the contrary, excavation of soils at depth would only create a risk for exposure to workers where none exists now.

Response #5:

- This comment has been partially answered in the previous sections. The argument that excavation of soils will present risks to workers is unsubstantiated. Standard construction

techniques would be applied to the excavation of the east gate soils and conventional monitoring and safety equipment would be available for use. Engineering controls such as dust suppression techniques and shoring could be implemented if necessary. The referenced pages 56-58 in the revised RI/FS report has failed to discuss the initial sampling results which exhibited Trichloroethene at 8200 ppb. The sections that are referenced discusses soil concentrations at in the range of 47 ppb for TCE. The RI has clearly shown the exceedances of NYSDEC soil cleanup goals and groundwater standards.

Comment #6:

- Section 7.2: Evaluation of Remedial Alternatives, 1. Compliance as SCGs, the PRAP states: Alternative #1 would not meet SCGs for groundwater or soils because the contaminated materials would be allowed to stay in place and exceed standards and guidance values. Contaminated materials could continue to migrate and impact off site receptors. The PRAP suggests that a "no action" alternative does not comply with SCGS. This is contrary to analyses of the "no action" alternative in the RI/FS Report. The PRAP conclusion apparently is founded on the assumption that there are current users of contaminated groundwater at the site. However, that is inconsistent with the PRAP's own finding that "there are no known users of groundwater within a 1.5 mile radius of the site and the area is serviced by a public water supply" (PRAP, p. 4). Accordingly, DEC's conclusion that the no action alternative does not comply with SCG's is inconsistent with its own findings and contrary to the RI/FS Report.

Response #6:

- In the Department's December 19, 1997 comment letter on the RI/FS, concerns about the definition of the contaminated groundwater plume and the potential for off site migration and the need to define this during a preliminary design phase, are discussed. The current understanding of the site does indicate that the groundwater is contained within the site and with deed restrictions current users and site operators would not utilize the water. The premise of this comment relates to the basis that in New York State all groundwater is considered to be useable as a potable water supply. Left unremediated, off site groundwater could be impacted and future groundwater users could be affected. It is the Department's understanding that there are no current users of the groundwater in the vicinity, however, this does imply that the Department will restrict future use in the area.

Comment #7:

- Section 7.2 Evaluation of Remedial Alternatives, 2. Protection of Human Health and the Environment, the PRAP states: Alternative #1 would not be considered to be protective of human health and the environment since site related contamination above cleanup goals would remain in-place and would continue to impact groundwater and migrate off site. DEC's conclusion in the PRAP that the "protection of human health and the environment"

criterion is not met apparently is based on a future contingency that residential wells would be installed in the contaminated zone. This is inconsistent with the PRAP's own findings that there are no current users of this groundwater (PRAP, p. 4).

Response #7:

- This statement, as discussed above, is valid. The Department's review of local groundwater users did not identify any current users in the near vicinity, however the Department cannot control or prohibit future use of groundwater. The Department's responsibility is to protect all the groundwater of NYS and to provide for remedial programs which will restore groundwater quality for unrestricted future use.

Comment #8:

- Section 7.2 Evaluation of Remedial Alternatives, 4. Long-term Effectiveness and Permanence, the PRAP states: Alternative #1 would not provide long-term effectiveness or permanence because contamination would remain in place. The conclusion in the PRAP that the "no action" alternative "would not provide long-term effectiveness or permanence" is not supported by evaluation of remaining risks, the adequacy of the controls intended to limit the risk, or the reliability of the controls.

Response #8:

- Pursuant to the Department's Technical and Administrative Guidance Memorandum (TAGM) 4030 for the Selection of Remedial Actions at Inactive Hazardous Waste Sites this section is valid. As compared to the other alternatives, the no action alternative is not considered to provide long-term effectiveness or permanence. Furthermore, the primary focus of this evaluation section is the extent and effectiveness of the controls that may be required to manage the wastes or residuals remaining at the site and the operating system necessary for the remedy to remain effective. The no action alternative does not provide any controls or systems to manage contaminated soil or groundwater.

Comment #9:

- Section 7.2 Evaluation of Remedial Alternatives 7. Cost, the PRAP states: Capital and operation and maintenance costs are estimated for each alternative and compared on a present worth basis. Although cost is the last balancing criteria 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. Cost is a critical consideration for any remedies that interested parties may perform. DEC estimates that its proposal for soil removal in the east gate area will cost $60,000. That proposal is intended to remedy soils that pose only minimal and acceptable risk to human health or the environment. Contrary to the implication in the PRAP, it is not required that remedial alternatives meet all the other "balancing" criteria before cost

is taken into consideration. Cost must be considered for those alternatives that comply with SCG's and that are protective of the public health and the environment. The applicable regulations provide that a remedy that satisfies the threshold criteria shall be "cost effective." To be "cost effective," the cost of the remedy is to be proportional to the evaluated "long-term effectiveness and permanence"; the "reduction of toxicity, mobility or volume through treatment"; and "short-term effectiveness.ö 40 C.F.R. § 300.430(fl(ii)(D). In evaluating the criterion for "reduction of toxicity, mobility or volume through treatment" for soils in the east gate area, the PRAP does not propose any treatment of east gate soils as part of their off-site disposal nor will treatment occur if the soils remain in place. Therefore, both alternatives for the soil will have the same evaluation with respect to this criterion and as a result would not support the increased cost of excavation and off-site disposal. There has been no evaluation for excavation and off-site disposal under the "long-term effectiveness and permanence" criterion. The concerns associated with the soils remaining on-site have not been shown to outweigh the vagaries attendant to off-site disposal of contaminated soils. Moreover, excavation of contaminated soils produces the possibility of an unfavorable exposure to short term risks. Thus, the cost of off-site disposal is disproportionately high in comparison to the lack of increased benefit to long-term performance and short-term impacts. As a result, removal of soils from the east gate area is not "cost-effective.ö

Response #9:

- Several parts to this comment have been responded to in previous comments. The Department feels that the removal of these contaminated soils and the restoration of this area to prerelease conditions provides a benefit and is protective of human health and the environment. In addition, if you take into consideration the costs associated with containment, sampling and analytical costs which will be required during any long-term monitoring and maintenance program, the benefit of removing these soils becomes more evident. In addition, the site in question is not owned or operated by ELG Haniel Metal Corporation, if these soils are not removed, future use of this area may be restricted and future sales or development of this site may be limited. However ELG Haniel Metal Corporation does not have any interest vested in the future use of this site or to what level future use restrictions are applied which may diminish the developablilty and future retail of this property.

Comment #10:

- Section 8: Summary of the Preferred Remedy, the PRAP states: Based upon the results of the RI/FS, and the evaluation presented in Section 7, the NYSDEC is proposing Alternative #3, along with removal of contaminated soil near the east gate, as the remedy for this site. The elements of the proposed remedy are as follows: 1) installation of a groundwater collection and treatment system based on the remedial design program;

2) installation of a soil vapor extraction system at RW-1 and RW-2; 3) excavate contaminated soil in the vicinity to meet soil clean up goals; 4) implementation of a site-wide operation, monitoring and maintenance program to insure that the remedial program is effective and remedial action goals are obtained; 5) institutional controls such as deed restrictions on groundwater use will be implemented until groundwater standards are obtained. DEC's own proposal for excavation and off-site disposal at the east gate area does not satisfy its stated goals for remediation. That alternative would not "reduce, control, or eliminate, to the extent practicable, the contaminated soil present on site" and it would not "provide for attainment of SCGs for groundwater quality to the extent practicable." That is because the cost of the proposed excavation remedy makes it economically impractical. By insisting on an unwarranted soil excavation remedy in the east gate area, DEC effectively reads "to the extent practicable" out of its own stated remediation goals. Moreover, the excavation remedy for the east gate area does not serve to eliminate the potential for direct human or animal contact with the contaminated soils on site" because no such potential currently exists. Indeed, excavation of the soils would have exactly the opposite affect by creating a risk of human exposure. Finally, the proposed soil removal for the east gate area would not "mitigate the impacts of contaminated groundwater to the environment" because there is no off-site groundwater contamination caused by these soils. (PRAP, p. 5)

Response # 10:

- This comment has been addressed in previous responses.

Comment #11:

- The PRAP also states: The remedial design would 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 RI/FS would be resolved. This would include the determination of the size, location and number of groundwater and soil gas extraction wells. The "Summary of the Preferred Remedy" in the PRAP also seems to imply that further details are necessary for the installation of the proposed system. The RI/FS Report proposes a remedial system for which no further investigation or field study is needed. The size, location and number of groundwater and soil gas extraction wells has been determined. Undefined "uncertainties identified in the RI/FS process" have been resolved to the extent necessary. No further verification of conceptual design or details of construction and operation are necessary or economically practicable with respect to the remediation proposed in the RI/FS Report.

Response #11:

- As discussed in the Department comment letter on the RI/FS report, there exists one area on the site to the northwest of the degreasing area where it has been shown that

contaminated groundwater may be flowing in this direction. This area does not have any monitoring wells nor has it been sampled by any other means. In order to verify this potential pathway and to define the limits of a collection system, the Department has proposed to perform some limited evaluation of this area during the preliminary design stages. The Department's objective in this situation is to construct and operate a remedial design system that is effective and efficient and meets the remedial objectives within a reasonable time frame. If contamination is migrating from the site and is not properly identified and treated, future off site migration may occur which will be more difficult to capture and additional liabilities will be incurred. Therefore, the limited program is required. A properly engineered and designed system is the goal of the Department. The design, construction and operation for the groundwater extraction and soil vacuum extraction may not vary from that which is discussed in Section 6 of the RI/FS, however given the unknowns which have been identified above, a preliminary design program will ensure that a properly sized, located and equipped system is constructed and operated to be effective and efficient. The design for the removal of the soils located near the east gate will also be required under this program. The Department expects the Responsible Parties to follow TAGM HWR-95-4056 for remedial actions.

Administrative Record
Northeast Alloys and Metals Inc.
Site No. 6-33-045

1. Hydrogeologic Investigation, Empire Soils Investigations, Inc., Dated 1989

2. Environmental Investigation, Huntingdon Empire Soils Investigations Inc., Dated 1992

3. Soil and Groundwater Investigations, ERM Northeast, Dated 1993

4. Soil Gas and Groundwater Investigation, Harress Pickel Consultants, Dated 1994

5. Remedial Investigation/Feasibility Study Work Plan, Civil and Environmental Consultants, Inc., Revised October 3, 1997

6. Remedial Investigation/Feasibility Study Report, Civil and Environmental Consultants, Inc., Revised: February 12, 1998

7. Proposed Remedial Action Plan, NYSDEC, February 23, 1998.