



Department of Environmental Conservation

Division of Hazardous Waste Remediation

Primoshield Plating Site

Site Number 6-33-027

City of Utica

Oneida County, New York

Record of Decision

March 1995



New York State Department of Environmental Conservation
GEORGE E. PATAKI, Governor

MICHAEL D. ZAGATA, Commissioner

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- In consultation and cooperation with homeowners, thoroughly clean walls, floor and sumps in the adjacent residence basement (low pressure wash and rinse etc.). Following cleaning, seal the interior south basement wall of the adjacent residence with a waterproof sealant or coating. Remove existing basement sump sediments (and any other basement cleaning residuals) for disposal at approved off-site facilities.
- Excavate and dispose of off-site, contaminated floor pit soils and other contaminated soils beneath or adjacent to the floors and foundation walls of the three existing Primoshield Site buildings (controlled demolition of these three existing buildings will be required to complete this part of the site remediation).
- Install and operate a shallow groundwater interceptor trench and collection system. Periodically remove collected groundwater to the Oneida County POTW by truck for final treatment and disposal.
- Monitor site groundwater and any seepage into the adjacent residence basement.

New York State Department of Health Acceptance:

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

Declaration

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

3/30/95

Date

Michael J. O'Toole, Jr.

Michael J. O'Toole, Jr.

Director

Division of Hazardous Waste Remediation

DECLARATION STATEMENT - RECORD OF DECISION

Primoshield Plating Site
City of Utica, Oneida County, New York
Title 3 Project
Site Code: 6-33-027

Statement of Purpose and Basis:

The Record of Decision (ROD) presents the selected remedial action for the Primoshield Plating Inactive Hazardous Waste Disposal 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, 1990 (40 CFR 300).

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

Assessment of the Site:

Actual or threatened release of hazardous waste constituents 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) for the Primoshield Plating Site and the criteria identified for evaluation of alternatives, the NYSDEC has selected the following remedy for the Site:

- Excavate approximately the top one foot of contaminated surface soil from the Primoshield Site and similar areas of impacted surface soils from the adjacent private property for off-site disposal at an approved facility. Backfill excavated areas with compacted clean fill and a vegetated topsoil cover.
- Identify, locate and properly terminate (or separate) all existing utilities on-site. Excavate and remove on-site sewer lines (and any associated contaminated soils) for disposal at an approved off-site facility. Separation of currently operational on-site sewer lines (and/or other utilities) may also be required.

**PRIMOSHIELD PLATING SITE
CITY OF UTICA - TITLE 3 PROJECT
SITE NO.: 6-33-027**

**RECORD OF DECISION
MARCH 1995**

**PREPARED BY:
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION**

SECTION 1: SITE LOCATION AND DESCRIPTION

Primoshield Inc. is a former Metal Electroplating facility located at 1212 St. Vincent Street; Utica, New York 13501. The site is located in a mixed commercial/residential area within the City of Utica and is also located in Oneida County and NYSDEC Region 6. Due to past operations and the presence of hazardous wastes at the site, it has been listed as a Class 2 Inactive Hazardous Waste Site (Code No.: 6-33-027) on the NYSDEC registry of inactive hazardous waste sites. The site is bordered by Conkling Avenue on the northwest and St. Vincent Street to the south and east. The DePaul commercial building and property border the site on the southwest and two residential properties border the site on the northeast (see Figures 1 & 2). The site, as defined in the registry, consists of the Primoshield Plating property and the adjacent DePaul Building cinder and gravel parking lot which together total approximately 2.4 acres. The Mohawk River is located downgradient from and approximately one and one half miles to the north of the site. The former Bossert Manufacturing Plant (Site Code: 6-33-029) is located approximately one mile to the west of the Primoshield Site and is also a hazardous waste site and a City of Utica Title 3 Project.

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

Primoshield Inc. was a metal electroplating facility that operated from the early 1970s until August 1985. The Primoshield property consists of a factory or production building, a small office building, a small laboratory and a storage trailer all of which are in an advanced state of disrepair.

A large number of drums and open vats (some containing acids, cyanide solutions and spent plating solutions) were left behind when the facility was abandoned by its owners following a fire which occurred during August of 1985.

Local citizen concerns regarding health and safety issues associated with this site were transmitted to the NYSDEC. Following an initial site reconnaissance and sampling effort by NYSDEC in December of 1985, laboratory sample results indicated a very high risk to the public from the site at that time. Consequently, on March 12, 1986 the NYSDEC formally petitioned the U.S. EPA Region II Office to perform an Emergency Response and Removal Action at the Primoshield Site, including but not limited to, the cleanup and removal of the surficial and containerized hazardous wastes and the installation of a fence and gate system to resecure the site.

2.2: Remedial History

During 1986 and 1987 the USEPA conducted an emergency response and removal action at the Primoshield Site. All of the containerized waste and most of the accessible surficial waste materials were removed from the site during this initial cleanup and taken to approved off-site disposal

facilities. Site security was also established by the installation of a chain link fence and gate system. In November 1987, U.S. EPA emergency response and cleanup actions at the Primoshield Site were completed and jurisdiction for further remedial action at the site was returned to NYSDEC.

Following the fire which occurred in August 1985, the Primoshield facility was abandoned by its owners and the City of Utica subsequently assumed ownership of the property due to non-payment of taxes. In December of 1989, the NYSDEC signed a negotiated Order on Consent with the City of Utica which agreed to perform a Remedial Investigation/Feasibility Study (RI/FS) to further investigate and remediate residual hazardous waste contamination remaining at the site. The City of Utica applied for and received State assistance (75% sharing of eligible costs) under Title 3 of the New York State (NYS) 1986 Environmental Quality Bond Act (EQBA) (State Assistance Contract No. C300241) to complete an RI/FS at the Primoshield Site. The City of Utica subsequently retained O'Brien and Gere Engineers Inc. (Syracuse, N.Y.) and Harza Northeast Inc. (Utica, N.Y.) to provide engineering services and technical support.

In April 1991 an initial site reconnaissance for the RI/FS program was conducted at the site. The reconnaissance consisted of a walkover of the Site and surrounding areas, underground storage tank sampling and a preliminary building structural survey. Based on the results of the Site reconnaissance, previous U.S. EPA sampling efforts, previous U.S. EPA response reports, and a comprehensive file and literature search, the following RI/FS program documents were developed: Program Scope and Work Plan (WP), Project Title 3 Budget, Health and Safety Plan (HASp), Quality Assurance Project Plan (QAPP), Field Sampling Plan (FSP), Site History, and Waste Management Plan (WMP).

SECTION 3: CURRENT STATUS

In response to a determination that the presence of hazardous waste at the Site presents a significant threat to human health, the City of Utica has recently completed a Remedial Investigation/Feasibility Study (RI/FS).

3.1: Summary of the Remedial Investigation

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

The RI was conducted in a single phase beginning with a site baseline survey which was initiated during September/October 1992 and ending with groundwater sample collection and analyses during September 1993. Some additional sample collection and analyses (primarily for metals in surface soils and TCLP testing of building materials) was conducted after April 1993 to fill in gaps in the data base. A one day on-site air quality sampling and monitoring program conducted on August 29, 1994 was the final field data collection (to date) for the Primoshield Site Remedial Investigation.

The following activities were conducted as part of or in support of the Remedial Investigation (RI) at the Primoshield Site (more complete information can be found in the RI Report):

- *Perform a Site Baseline Survey & Establish a Sampling Grid*
- *Perform a Soil Vapor Survey and a Geophysical Survey and install Ground Water Monitoring Wells [Includes subsurface soil sampling and analyses and groundwater sampling and analyses]*
- *Complete Surface Soil Sampling and Analyses. (Consultants & NYSDOH)*
- *Perform Sediment Sampling [manholes, catch basin, and building sumps]; Perform Residential Basement Sampling [sump, water and sediment]*
- *Sample Building Structural Materials*
- *Perform a Human Health Risk Assessment (HRA)*
- *Complete a Fish and Wildlife Impact Analysis [Step I]*

In order to determine which media (soil, groundwater, etc.) contain contamination at levels of concern, the analytical data obtained from the RI were compared to Standards, Criteria, and Guidance (SCGs). Groundwater, drinking water and surface water SCGs which were identified for the Primoshield site were based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part V of the NYS Sanitary Code. For the evaluation and interpretation of soil and sediment analytical results, NYSDEC soil cleanup guidelines for the protection of groundwater, background conditions, and risk-based remediation criteria were used to develop remediation goals for soil and sediment. Based upon the limited amount of data generated from on-site air quality monitoring during the site investigation (RI), ambient air quality does not appear to be adversely affected by the site at this time. However, due to the close proximity of neighboring residences, real time ambient air quality monitoring (e.g. particulates, heavy metals, and VOCs) will be required during remedial construction. Acceptable air quality parameter levels during remedial construction will be based on health and safety criteria for both on-site workers and for nearby residents.

Based upon the results of the remedial investigation in comparison to the SCGs and potential public health and environmental exposure routes, certain specific areas and media of the site require remediation. These are summarized below. More complete information can be found in the RI Report.

Chemical concentrations are reported in parts per billion (ppb), parts per million (ppm), and parts per billion by volume (ppbv) for air samples. For comparison purposes, SCGs (where available) are given for each medium.

Site related contaminants of concern in surface soil were identified (based on the results of the RI) as cadmium, chromium, nickel and cyanide. Site-related contaminants in groundwater above class GA groundwater standards included trichloroethene, 1,1,1-trichloroethane, 1,1 dichloroethane and chromium. Water and sediment samples collected from the sumps in the basement of the adjacent residence indicated elevated concentration levels for both volatile organic compounds (VOCs) (1,1-dichloroethane; 1,1,1 trichloroethane; and trichloroethene) and heavy metals/inorganics (cadmium, chromium, lead, nickel, and cyanide). These elevated concentration levels of both VOCs and heavy metals/inorganics in both the

groundwater and the sediment in the basement of the adjacent residence indicate the need to address these two media during site remediation.

Average and maximum concentration values for parameters of concern in various media are contained in Table 1 attached. Where appropriate, site background concentration levels and/or applicable regulatory guidelines or criteria are also listed in this table.

Surface soils are primarily contaminated with inorganics (metals and cyanide) and with the exception of a few relatively small areas, the contamination in surface soil which exceeds site cleanup criteria is generally limited to the top 12 inches. The total estimated areal extent of impacted surface soil is approximately 4,100 square yards. The current total volume estimate of contaminated surface soils is approximately 1,600 cubic yards. The plan area of the shallow groundwater plume at the site is currently estimated to be approximately one-half acre in size and to contain a saturated thickness of approximately six feet beginning at approximately four feet below existing grade. Contamination of the shallow groundwater system is due primarily to a limited number of Volatile Organic Compounds (VOCs) and metals (see Table 1). The shallow surficial overburden strata (generally less than 20 feet in total thickness) at the site are underlain by approximately 50 or more feet of dense silt/clay rich glacial till which functions as a barrier or aquitard preventing the vertical migration of contaminated groundwater at the site. Both the surficial soil contamination and the shallow groundwater contamination extend a short distance to the north from the Primoshield property onto the adjoining property.

Current analytical data for the site and adjacent areas developed during the RI, indicate that surface soil cleanup criteria as outlined in NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 92-4046 are not being met both on the Primoshield Site itself and on the adjoining residential property to the North. The RI data also indicate that current NYS Class GA Ground Water Standards for a number of parameters are not being met at the site and at the adjoining property. (See Table 1 attached).

A comprehensive Human Health Risk Assessment (HRA) was performed as part of the RI for this site. A detailed discussion of the results of the Risk Assessment is contained in the RI report. A summary of current risks at the Primoshield property and at the adjacent property is contained in Tables 2 and 3 attached. Current human health risks at the Primoshield Site and at the adjoining property exceed levels considered to be acceptable by both the NYSDOH and the USEPA. Following the implementation and operation of the remedial actions proposed for the Primoshield Site, risk levels both on-site and off-site should be reduced to acceptable levels.

3.2. Interim Remedial Measures:

Interim Remedial Measures (IRMs) are conducted at sites when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS.

A number of IRMs were under consideration during the RI/FS at the Primoshield Site. The following two IRMs were implemented:

1. On June 15, 1993 an interim structural brace (tubular metal scaffolding system) was installed in roughly the center of the main production building, to transfer roof loading from an isolated unbraced vertical column which appeared to be close to failure.

2. On April 19, 1994 a site surficial cleanup was held at the Primoshield Site. Scrap metal and scrap lumber were collected and stockpiled for later recycling and/or disposal. Brush was cleared and stockpiled and miscellaneous waste and debris were collected and stockpiled for later disposal off-site.

3.3 Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the health risks can be found in Section 8 - "Risk Assessment" of the September 1994 RI Report.

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

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

- Adjacent residence - Complete exposure pathways are incidental soil ingestion, dermal contact with soils, and dermal contact with basement sump sediments.
- Primoshield Property - Trespassers to this portion of the site are potential receptors. Currently there is a slight potential for trespassers to be exposed to residues in surface soils via incidental ingestion and dermal contact.

See Tables 8-1 through 8-4 in the September 1994 RI Report for a more specific discussion of the Primoshield Risk Assessment Exposure Pathway Analysis.

Current USEPA Risk Guidelines (both cancer & non-cancer) are exceeded at the Primoshield property and the adjacent residence. See Tables 2 and 3 attached for specific risk levels.

3.4 Summary of Environmental Exposure Pathways:

This section summarizes the types of environmental exposures which may be presented by the site. The Habitat Based Assessment included in the RI presents a more detailed discussion of the potential impacts from the site to fish and wildlife resources. The following potential pathway for environmental exposure has been identified:

- Discharge of heavy metals and VOCs from the site through the existing sewer lines into the Oneida County sewer system and then either directly or indirectly into the Mohawk River.

This pathway will be broken during remedial construction when the existing site sewer lines are excavated for disposal at an approved facility off-site. Existing site connections to the Oneida County sewer system will be terminated and the excavations restored to the original grade with compacted clean fill and a vegetated topsoil surface layer.

A Step I Fish and Wildlife Impact Analysis (FWIA) was completed in accordance with NYSDEC guidelines as part of the RI (see RI Section 7) to identify potential ecological receptors that inhabit the study area and vicinity and to evaluate the potential for impact on these receptors based on study area conditions and exposure pathways.

FWIA conclusions included:

- The majority of the Site and adjacent land area is extensively developed resulting in their classification as cultural cover types.
- Other than the Mohawk River, (noted previously) there are no nearby surface waters or wetlands present in the study area that could be affected by the Site.
- The Site is only minimally used by urbanized bird species because of the poor habitat quality, lack of food sources, and availability of better habitat in adjacent areas.
- No complete exposure pathways (other than the Mohawk River noted previously) were identified because of the general lack of ecological receptors on the Site.

Based upon the results of the Step 1 Fish and Wildlife Impact Analysis, no additional Fish and Wildlife Impact assessment has been determined to be necessary at this time.

SECTION 4: ENFORCEMENT STATUS

The City of Utica has retained outside counsel to pursue Potentially Responsible Parties (PRPs). PRPs are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The NYSDEC and the City of Utica entered into a negotiated Consent Order on December 27, 1989. The Order obligates the City of Utica to implement a full remedial program at the Primoshield Site and through a State Assistance Contract allows reimbursement to the City of Utica (from the 1986 EQBA Title 3 Program) of up to 75 percent of the eligible cost of the remediation.

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. These goals are established under the overall goal of meeting all standards, criteria, and guidance (SCGs) and protecting 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 the contamination present within the soils on site.

- Eliminate the threat to surface waters by eliminating any future contaminated surface run-off from the contaminated soils on site, and any potential future discharge from site sewer lines to the Oneida County Sewer System.
- Eliminate the potential for direct human contact with the contaminated soils on site.
- Mitigate the impacts of contaminated groundwater to the environment and to nearby residents.
- Prevent, to the extent possible, migration of contaminants in the soils to groundwater.
- Provide for attainment of SCGs for groundwater quality at the limits of the area of concern (AOC).
- Remediate the site and adjoining property to provide for future delisting and unrestricted use.

SECTION 6: SUMMARY OF THE EVALUATION OF ALTERNATIVES

Potential remedial alternatives for the Primoshield Site were identified, screened and evaluated in a Feasibility Study. This evaluation is presented in the report entitled Primoshield Final Feasibility Study (FS) January 1995. A summary of the detailed analysis follows.

6.1: Description of Alternatives

The potential remedies are intended to address the contaminated surface soils, sediments, other soils (e.g. sewer line or seepage pit soils) and groundwater at the site. The following is a brief description of each of the four (4) remedial alternatives proposed for the Primoshield Site:

Alternative 1 - No Action

The no action alternative is evaluated as a procedural requirement and as a basis for comparison.

Under this alternative the site would remain in its present condition and human health and the environment would not be provided any additional protection.

For the Primoshield Site, this alternative would consist of the following components:

- Establish Deed Restrictions (these would apply to the Primoshield property only)
- Continue to restrict access to the site by means of a long term program to maintain the existing fence and gate system (this would apply to the Primoshield property only) and
- Implement a long term groundwater monitoring program at the site and at the adjacent residence.

The cost to implement Alternative 1 has been estimated as follows based on an interest rate of 5% and a projected life cycle of 30 years (both are estimated values):

Present Worth (Total)	=	\$ 118,000
Capital Costs	=	\$ 5,000
Annual O&M Costs	=	\$ 31,000

It is estimated that approximately 6 months to 1 year would be required to implement proposed Alternatives 2, 3, or 4. It is estimated that significantly less time would be required to implement proposed Alternative 1.

Alternative 2 - Surface Soil Removal

Alternative 2 involves the excavation and stockpiling of contaminated surface soils (generally the top 12 inches in most areas) and the removal of these materials off-site for final treatment and/or disposal at approved facilities. The following additional components are common to Alternatives 2, 3, and 4:

- Backfill excavated areas with compacted clean fill and a vegetated surface topsoil layer.
- Excavation, removal and disposal of on-site sewer lines and any associated contaminated soils.
- Removal and off-site disposal of resident basement sump sediments.
- Clean walls, floor and sumps of resident basement (in consultation and cooperation with homeowners).
- Install groundwater interceptor/collection trench and associated underground storage tank.
- Periodically transport collected groundwater by truck to the Oneida County POTW for treatment and discharge.
- Provide a long term (currently estimated at 15 years maximum) monitoring program for the resident basement sumps and site groundwater.
- Excavate and remove contaminated soil from building floor pits, beneath floor slabs, and from below and adjacent to building foundations for subsequent off-site treatment and/or disposal.
- Segregate and package any RCRA listed hazardous wastes for manifesting and subsequent shipment off-site to approved TSD facilities.

The cost to implement Alternative 2 has been estimated as follows based on an interest rate of 5% and a projected life cycle of 15 years (both are estimated values):

Present Worth (Total) = \$ 1,059,000
Capital Cost = \$ 637,000
Annual O&M Cost = \$ 62,000

Alternative 3 - Surface Soil Cover

Alternative 3 differs from Alternative 2 in that; instead of excavation, removal and off-site treatment and/or disposal of the contaminated 12 inch surface soil layer from the site and adjoining area to the north; these areas of contaminated soil would be left in place and covered over with a clean vegetated soil cover (estimated thickness of 12 inches). Alternative 3 would also require that deed restrictions and security

fencing be maintained at the site long term (plus 30 years). These last two restrictions could only be applied to the Primoshield property itself (which is currently owned by the City of Utica) but not to adjoining properties which are not currently owned by the City of Utica.

The cost to implement Alternative 3 has been estimated as follows based on an interest rate of 5 % and a project life cycle of 15 years (both are estimated values):

Present Worth (Total) = \$ 845,000
Capital Cost = \$ 422,000
Annual O&M Cost = \$ 62,000

Alternative 4 - Surface Soil Treatment

Alternative 4 differs from Alternative 2 in that; instead of excavation, removal and off-site treatment and/or disposal of the contaminated 12 inch surface soil layer from the site and adjoining area to the north; these areas of contaminated soil would be excavated and the soils treated "Ex-situ" to chemically bind or fix the heavy metal contaminants in the soil matrix. Following treatment, the heavy metal contaminants would be resistant to movement or transport from the stabilized soil mass or matrix. After treatment, the stabilized soil would be recompacted in place and covered with a surface vegetated soil layer.

The cost to implement Alternative 4 has been estimated as follows based on an interest rate of 5 % and a project life cycle of 15 years (both are estimated values):

Present Worth (Total) = \$ 982,000
Capital Cost = \$ 575,000
Annual O&M Cost = \$ 64,000

Refer to Table 4 (attached) for a detailed listing or comparison of the components of the four (primary) remedial alternatives currently being proposed for the Primoshield Site (6-33-027).

A detailed cost comparison of the proposed remedial alternatives for this site is provided in Table 5 (attached).

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 January 1995 Feasibility Study (FS).

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

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

Alternative 1 (No Action) would not meet Evaluation Criteria 1 (Compliance with SCGs). Alternative 2 (Surface Soil Excavation and Removal) would meet Evaluation Criteria 1. Alternative 3 (Surface Soil Vegetated Cover) would not meet Evaluation Criteria 1 (Failure due to elevated metals contamination in surface soils). Alternative 4 (Surface Soil Excavation, Ex situ Treatment, and Replacement) would meet Evaluation Criteria 1.

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 meet Evaluation Criteria 2 (Protection of Human Health and the Environment). Alternative 2 would meet Evaluation Criteria 2. Alternative 3 would be likely to meet Evaluation Criteria 2 in the short term (5 to 10 year period following remedial construction) but may not meet Evaluation Criteria 2 in the long term should the site experience cover erosion. This is primarily the result of the large amount of untreated contaminated material (primarily surface soil) which would remain at the site following remedial construction. Alternative No. 3 is also less protective of groundwater than Alternative No. 2. Alternative 4 would meet Evaluation Criteria 2.

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 implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared with the other alternatives.

Alternative 1 would not achieve remedial objectives and would be only minimally effective in the short term. Other potential short term adverse impacts of Alternative 1 would be minimal to none. Alternatives 2, 3, and 4 would all be effective in the short term. Remedial construction activities associated with Alternatives (2, 3 or 4) would result in some potential short term impacts (primarily to the neighboring community). These potential short term impacts (e.g., dust, noise, etc) are considered to be approximately the same order of magnitude for each of these three alternatives, are amenable to at least partial mitigation with currently available technology, and are considered to be generally acceptable for the short duration required for remedial construction. Except for site groundwater, remedial objectives (for Alternatives 2, 3, and 4) should be achieved following the completion of remedial construction activities. It is currently estimated that (for Alternatives 2, 3, or 4) remediation of site groundwater would be completed within approximately a 15 year period following the completion of remedial construction activities. This estimate may be optimistic for Alternative 3.

4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of alternatives after implementation of the response actions. 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 be an effective or permanent remedy for the long term. Due to the inadequacy of remedial measures associated with Alternative 1, large quantities of contaminated materials would remain on-site indefinitely following remediation. Residual risk levels would remain high to very high (in particular with respect to nearby human populations) and the adequacy and reliability of controls intended to limit the risk would be marginally adequate to inadequate. Alternative 2 would provide a permanent and effective remedy for the long term. Alternative 3 would be only a partially effective remedy for the long term. Contaminated surface soils would be covered with a shallow (1 foot) vegetated topsoil layer. Due to remaining contaminated materials and associated residual risk levels, this proposed remedy is considered to be of moderate to low reliability and adequacy over the long term. Alternative 4 would provide a permanent and effective remedy for the long term. The descending order of preference for the four remedial alternatives being considered (with respect to long term effectiveness and permanence) is as follows: Alternative 2, 4, 3 and 1.

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 not result in a reduction of toxicity, mobility or volume of contaminated materials at the site. Alternative 2 would result in reductions of toxicity, mobility and volume of contaminated materials (primarily surface soils) following remediation. Alternative 3 would not reduce the toxicity of contaminated materials at the site. It would result in a partial reduction of mobility of the contaminants (primarily in the surface soil). Also, it is likely that the period of time required to remediate site groundwater would be longer than that required for Alternatives 2 and 4.

Alternative 4 would result in a reduction of mobility of contaminants and possibly a reduction in toxicity (primarily for contaminated surface soils). This remedy would also result in an increase in volume of contaminated materials (primarily surface soils) at the site.

6. Implementability. The technical and administrative feasibility of implementing each alternative is evaluated. Technically, this includes the difficulties associated with the construction, the reliability of the technology, and the ability to monitor the effectiveness of the remedy. Administratively, the availability of the necessary personal and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc..

All four Alternatives could be readily implemented from both a technical and an administrative standpoint. It should be noted that deed restrictions and access restrictions (fencing and gates) can only be applied to the Primoshield property itself. These restrictions can not be applied to neighboring properties without the consent of the current owners.

7. Cost. Capital and operation and maintenance (O&M) costs are estimated for each alternative and compared on a present worth basis. Although cost is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, cost effectiveness can be used as the basis for the final decision. The costs for each alternative are presented in Table 5.

The total (Capital plus O&M) costs for the four alternatives (1 through 4) are summarized below:

- Alternative 1, No Action - \$118,000
- Alternative 2, Surface Soil Removal - \$1,059,000
- Alternative 3, Surface Soil Cover - \$845,000
- Alternative 4, Surface Soil Treatment - \$982,000

8. **Community Acceptance** - Concerns of the community regarding the RI/FS reports and the Proposed Remedial Action Plan (PRAP) were evaluated during a Public Meeting and 30 day Public Comment Period. A "Responsiveness Summary" has been prepared that describes public comments received and how the Department has addressed the concerns raised.

SECTION 7: SUMMARY OF THE GOVERNMENT DECISION FOR THE SELECTED REMEDY

Based upon the results of the RI/FS, and the evaluation presented in Section 7, the NYSDEC is proposing Alternative 2 as the remedy for this site.

This selection is based upon the evaluation contained in Section 7 and the conclusion that Alternative 2 best satisfies the initial two threshold criteria and the five primary balancing criteria. It is also anticipated that Alternative 2 would be most acceptable (of the four alternatives considered) to the City of Utica and to the neighboring community. Alternative 1 (No Action) would be significantly less costly than the other three alternatives being considered, but it was rejected as unsuitable since it would not be able to satisfy the two basic threshold criteria (1&2). Alternatives 2, 3 and 4 were all significantly more expensive (approximately \$1 million to 0.85 million) than Alternative 1 (\$118,000) but the cost difference between Alternatives 2, 3 and 4 is relatively small with Alternative 3 being the least expensive at \$0.845 million (total cost) and Alternative 2 being the most expensive at \$1.059 million (total cost). Alternative 2 would have the greatest Long-term Effectiveness and Permanence and also the greatest reduction of toxicity, mobility or volume of the three alternatives remaining. All three remaining alternatives can be readily implemented. However, of these three alternatives, Alternatives 2 and 3 would appear to be the most readily implementable. If alternative 2 is fully implemented, no waiver of standards (SCGs) would be required.

Further reasons for not selecting Alternatives 3 and 4 are as follows:

Alternative 4 has the potential to alter localized runoff patterns due to grade changes caused by replacement of the treated waste volumes. In addition, placement of the treated wastes on-site alters existing local topography and further reduces future redevelopment options for this property. Selection of Alternative 4 would also make future delisting of this site from the registry less likely when compared to the selection of Alternative 2.

Alternative 3 would leave significant quantities of untreated waste on-site following Remedial Construction. This action would require waiver of SCGs and would likely result in prolonging the groundwater collection and treatment needs. This in turn would result in even higher O&M costs than are currently shown in Table 5. Future delisting of this site from the registry would be difficult if not impossible. Future redevelopment options for this property would be restricted significantly.

The estimated present worth cost to implement the selected remedy is \$1.059 million. The cost to construct the remedy is estimated to be \$637,000 and the estimated average annual operation and maintenance cost for 15 years is \$62,000 per year. The Present Worth of the Annual O&M Costs for 15 years at 5 % interest is \$421,000.

The elements of the selected remedy are as follows:

1. A Remedial Design (RD) program to verify the components of the conceptual design and provide the details necessary for the construction, operation, maintenance, and monitoring of the selected remedy.
2. Site Remedial Construction or Remedial Action.
3. Any uncertainties identified during the RI/FS will be resolved during Remedial Design/Construction.

The following is a summary of the elements or components of Remedial Alternative 2:

- Excavate approximately the top one foot of surface soil from the Primoshield Site and similar areas of impacted surface soils from the adjacent residential property for off-site disposal at an approved facility.
- Backfill excavated areas with compacted clean fill and a vegetated topsoil cover.
- Identify, locate and properly terminate (or separate) all existing utilities on-site.
- Excavate and remove on-site sewer lines (and any associated contaminated soils) for disposal at an approved off-site facility. Separation of currently operational on-site sewer lines (and/or other utilities) may also be required.
- In consultation and cooperation with the homeowners of the affected residential property, thoroughly clean walls, floor and sumps in the adjacent residence basement (low pressure wash and rinse etc.).
- Following cleaning, seal the interior south basement wall of the adjacent residence with a waterproof sealant or coating.
- Remove existing basement sump sediments (and any other basement cleaning residuals) for disposal at approved off-site facilities.
- Excavate and remove contaminated floor pit soils and other contaminated soils beneath or adjacent to the floors and foundation walls of the three existing Primoshield Site buildings (controlled demolition of these three existing buildings will be required to complete this part of the site remediation).
- Install and operate a shallow groundwater interceptor trench and collection system.

- Periodically remove collected groundwater to the Oneida County POTW by truck for final treatment and disposal.
- Monitor site groundwater and any seepage into the adjacent residence basement.
- Dispose of excavated soils and other remediation residuals (including any RCRA listed hazardous wastes) at approved off-site facilities.

Following Remedial Construction a long term monitoring program will be instituted. This program will allow the effectiveness of the selected remedy to be monitored. This long term monitoring program will be a component of the operations and maintenance (O&M) for the site and will be developed by the City of Utica (in cooperation with the NYSDEC and NYSDOH) during Remedial Design and Construction .

SECTION 8: HIGHLIGHTS OF COMMUNITY PARTICIPATION

The NYSDEC relies on public input to ensure that the remedies selected for this site meet the needs and concerns of the community and that the remedies are an effective solution to the problem.

As part of the RI/FS, a Citizen Participation Plan (CPP) was prepared in November 1993. The principal objectives of the Citizen Participation Plan were:

1. To provide area residents with an understanding of the New York State Superfund process. Such an understanding promotes realistic public expectations about the activities, complexities and time involved with site investigation.
2. To provide accurate understandable information concerning the RI/FS program to interested citizens. NYSDEC provided information through project updates and public meetings.
3. To provide the community with information needed to express their views and to discuss issues of concern with NYSDEC, NYSDOH and the City of Utica during the RI/FS process. Documents and data were made available for public review and comment. Citizens and public officials were asked to express their views and to discuss issues of concern with the City of Utica, NYSDOH, and NYSDEC.
4. To establish a good relationship with the local media so that accurate information about Primoshield Site RI/FS activities would be reported.

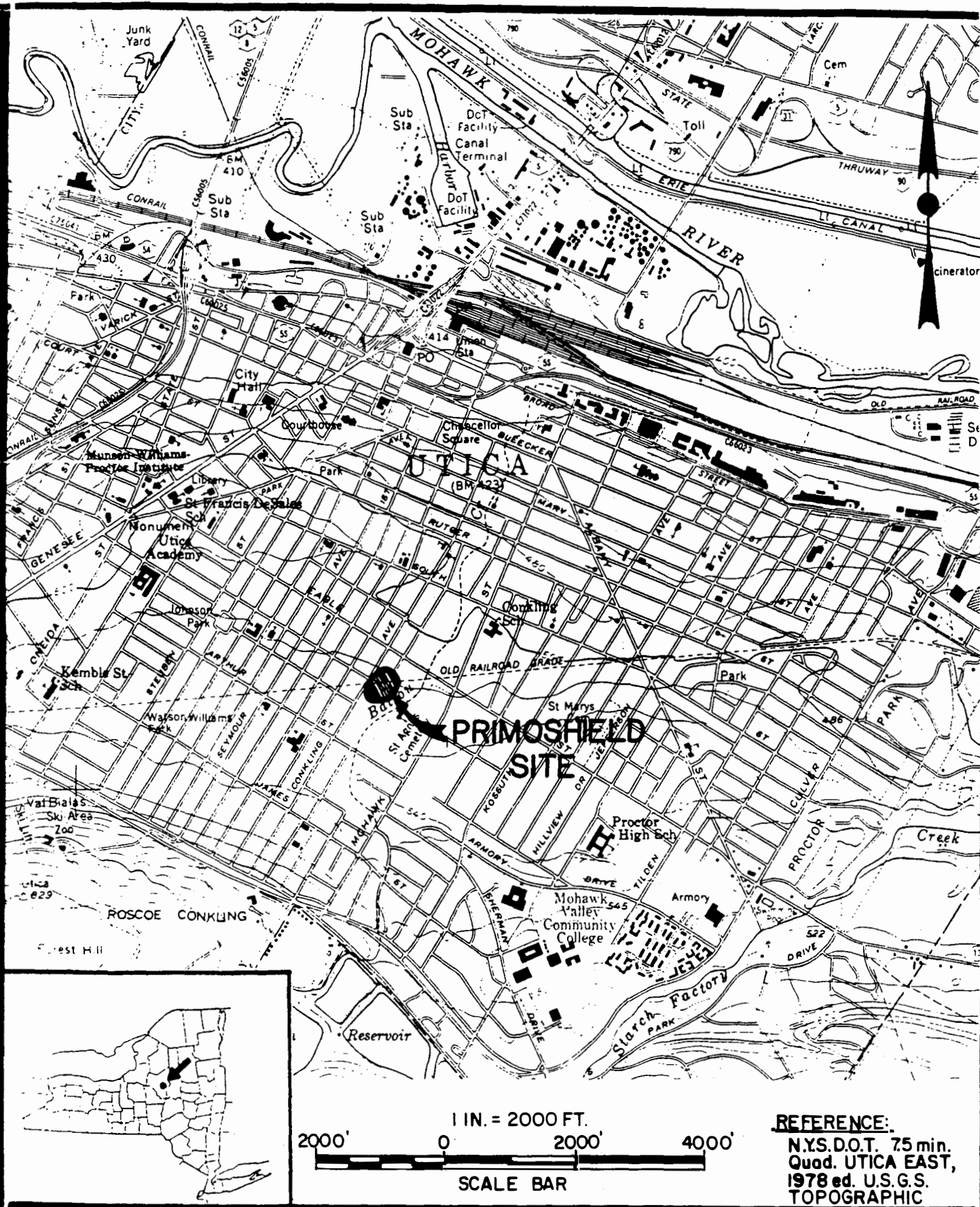
The following public participation activities were carried out:

1. Document repositories were established at the City of Utica Public Library, the Utica City Clerk's Office, and the NYSDEC Region 6 Headquarters in Watertown, N.Y. Pertinent reports and documents related to the RI/FS were placed there during the project.

2. Two public meetings were held at the City of Utica Office Building in Utica, N.Y. The first meeting on January 21, 1993 was an initial information session to discuss site history and background and proposed RI/FS activities. A detailed set of fact sheets was distributed to the public in conjunction with the initial public meeting. This was followed by a project update fact sheet which was distributed to the public in February 1994. The second public meeting was held on February 2, 1995. Its purpose was to solicit public review and comment on NYSDEC's proposed remedial alternative.
3. A Proposed Remedial Action Plan (PRAP) was issued on January 26, 1995. A 30 day public comment period was provided.
4. Questions and answers recorded during the February 2, 1995 public meeting and during the 30 day public comment period (January 26, 1995 to February 27, 1995) were used to develop the Responsiveness Summary presented in Appendix B of this document.

Based on the information received during this process, there has been no significant change in the selected remedy for this site relative to the proposed remedy presented at the February 2, 1995 public meeting.

FIGURES



O'BRIEN & GERE

Stetson-Harza
A HARZA COMPANY

DATE

DRAWN LRM

NO. 6057

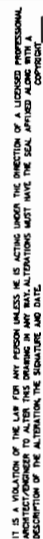
**SITE LOCATION
MAP**

FIGURE

1

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[illegible]

Stetson-Harza
A HARZA COMPANY
181 Ceresco Street, Utica, NY 13501/315/797-5800
Rensselaer Technology Park
250 Jordan Rd., Troy, NY 12180/518/283-8080

COUNTY OF ONEIDA	NYSDEC REGION 8	SITE CODE 8-33-027	STATE OF NEW YORK
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FIGURE 3
METALS &
VOLATILE ORGANIC
COMPOUND PLUME
IN SHALLOW
GROUND WATER

SHEET NO.

TABLES

Table 1
Contaminants of Concern at the Primoshield Site (6-33-027)

Media or Matrix	Contaminant	Concentration		Units	Criterion	Basis
		Avg.	Max.			
Surface Soil	Cadmium	4.9	131	mg/kg	10	DHWR
	Chromium	19.1	205	mg/kg	50	DHWR
	Nickel	242.4	2680	mg/kg	27.3 (30)	SB
	Cyanide	6.2	182	mg/kg	1.2 (1.5)	SB
	Lead	201.2	3730	mg/kg	500	DHWR
Groundwater	Trichloroethene	28	93	ug/l	5 (S)	GA
	1,1,1 Trichloroethane	61.8	180	ug/l	5 (S)	GA
	1,1 Dichloroethane	9.5	10	ug/l	5 (S)	GA
	Chromium	32.8	136	ug/l	50 (S)	GA
	Lead	13.0	43.5	ug/l	25 (S)	GA
	Iron (* 18,200)	16,934	74,100	ug/l	300 (S)	GA
	Manganese (*748)	1,500	12,900	ug/l	300 (S)	GA

Table 1 (continued)
Contaminants of Concern at the Primoshield Site (6-33-027)

Media or Matrix	Contaminant	Concentration		Units	Criterion	Basis
		Avg.	Max.			
Sump Sediments or Solids	1,1-dichloroethane	0.75	1	ug/kg	0.2	TAGM
	1,1,1 trichloroethane	43.3	65	ug/kg	0.8	TAGM
	trichloroethene	8.7	22	ug/kg	0.7	TAGM
	benzene	ND	ND	ug/kg	0.06	TAGM
	chloroform	3	3	ug/kg	0.3	TAGM
	Cadmium	25.7	32.4	mg/kg	10	DHWR
	Chromium	63.1	159	mg/kg	50	DHWR
	Lead	1525.8	4750	mg/kg	500	DHWR
	Nickel	2986.5	10,500	mg/kg	27.3 (30)	SB
	Cyanide	2	3	mg/kg	1.2 (1.5)	SB
Basement Seepage, Sump Water, Ground- water	1,1-dichloroethane	0.75	1	ug/l	5 (S)	GA
	1,1,1 trichloroethane	32	56	ug/l	5 (S)	GA
	trichloroethene	3.3	5.1	ug/l	5 (S)	GA
	benzene	7.4	7.4	ug/l	0.7 (S)	GA
	chloroform	2.4	2.4	ug/l	7 (S)	GA
	Cadmium	ND	ND	ug/l	20 (S)	GA
	Chromium	106	172	ug/l	100 (S)	GA
	Lead	659.2	1550	ug/l	50 (S)	GA
	Nickel	4740	13,900	ug/l	2,000 (S)	GA
	Cyanide	15.8	15.8	ug/l	400 (S)	GA

Table 1 (continued)

Contaminants of Concern at the Primoshield Site (6-33-027)

Notes:

1. TAGM = NYSDEC TAGM 92-4046. Numbers given represent recommended soil cleanup levels. For metals, the TAGM specifies the soil cleanup objective to be the higher of Site Background (SB) or risk-based TAGM levels.
2. SB = Site Background concentration level.
3. GA = NYS Class GA groundwater (GW) values obtained from NYSDEC Ambient Water Quality Standards and Guidance Values (October 1993).
4. (S) = Standard; DHWR = Current Division of Hazardous Waste Remediation (DHWR) guidance value.
5. Numbers in () indicate rounded Criterion Values.
6. (*) Indicates that site background values listed exceed current standards.
7. Since specific guidance values are not currently available for sediments, similar guidance values for soils have been used for comparison purposes.

Table 2
Human Health Risk
1212 St. Vincent Street

Primoshield Property

Exposure Pathway	Receptor	Upper bound excess Cancer risk	(Non Cancer) Upper bound hazard index
Incidental Ingestion of Soils	Adults	5×10^{-5}	7×10^{-2}
	Children	1×10^{-4}	1 *
	Trespassers	1×10^{-6}	5×10^{-3}
Dermal Contact with Soils	Adults	1×10^{-3} *	7×10^{-2}
	Children	5×10^{-4} *	2×10^{-1}
	Trespassers	3×10^{-5}	5×10^{-3}
Inhalation of 1,1,1-TCA	Adults	N/A	8×10^{-4}
	Children	N/A	7×10^{-4}

Notes:

1. Source: Primoshield Site (6-33-027) Final Feasibility Study (FS) Report, January 1995.
2. Hazard Index is a measure of non-carcinogenic human health risk.
3. * Indicates existing USEPA Risk Guidelines are exceeded.

Revised: January 31, 1995

Table 3
Human Health Risk

Adjacent residence

Exposure Pathway	Receptor	Upper bound excess Cancer risk	(Non Cancer) Upper bound hazard index
Ingestion of Soils	Adults	5×10^{-4} *	0.2
	Children	2×10^{-3} *	3 *
Dermal Contact with Soils	Adults	1×10^{-2} *	0.6
	Children	5×10^{-3} *	1 *
Dermal Contact with Basement Sediments	Adults	5×10^{-7}	2×10^{-2}
	Children	2×10^{-7}	5×10^{-2}
Inhalation of Basement Air	Adults	N/A	3×10^{-4}
	Children	N/A	1×10^{-3}

Notes:

1. Source: Primoshield Site (6-33-027) Final Feasibility Study (FS) Report, January 1995.
2. Hazard Index is a measure of non-carcinogenic human health risk.
3. * Indicates existing USEPA Risk Guidelines are exceeded.

Revised: January 31, 1995

Table 4

Primoshield Site (6-33-027), Remedial Alternatives, Major Components

Alternative 1 <u>No Action</u>	Alternative 2 <u>Surface Soil Removal</u>	Alternative 3 <u>Surface Soil Cover</u>	Alternative 4 <u>Surface Soil Treatment</u>
Groundwater Monitoring & Site Access Restrictions	Excavate top 1 foot of contaminated surface soil from the site and the adjoining property to the North	Install a 1 foot vegetated soil cover directly over the contaminated surface soils on site and on the adjoining property to the North	Excavate top 1 foot of contaminated surface soil from the site and the adjoining property to the North
Maintain a Perimeter Fence and Gate (Site) Long Term	Transport contaminated soil off-site for final treatment and/or disposal	Maintain a Perimeter Fence and Gate (Site) Long Term	Treat soils "Ex situ" to fix or bind chemically metals into the soil mass or matrix
Implement Deed Restrictions (Site) Long Term		Implement Deed Restrictions (Site) Long Term	Replace stabilized soils
			Cover with 1 foot vegetated soil layer
	Backfill excavated areas with compacted clean fill and a vegetated surface topsoil layer	Backfill excavated areas with compacted clean fill and a vegetated surface topsoil layer	Backfill excavated areas with compacted clean fill and a vegetated surface topsoil layer
	Identify, locate, and properly terminate (or separate) all existing utilities on-site.	Identify, locate, and properly terminate (or separate) all existing utilities on-site.	Identify, locate, and properly terminate (or separate) all existing utilities on-site.

Table 4 (continued)

Primoshield Site (6-33-027), Remedial Alternatives, Major Components

Alternative 1 <u>No Action</u>	Alternative 2 <u>Surface Soil Removal</u>	Alternative 3 <u>Surface Soil Cover</u>	Alternative 4 <u>Surface Soil Treatment</u>
	Excavation, removal and disposal of on-site sewer lines and any associated contaminated soils. Separate any active sewer lines.	Excavation, removal and disposal of on-site sewer lines and any associated contaminated soils. Separate any active sewer lines.	Excavation, removal and disposal of on-site sewer lines and any associated contaminated soils. Separate any active sewer lines.
	Removal and off-site disposal of resident basement sump sediments	Removal and off-site disposal of resident basement sump sediments	Removal and off-site disposal of resident basement sump sediments
	Clean walls, floor and sumps of resident basement (low pressure)	Clean walls, floor and sumps of resident basement (low pressure)	Clean walls, floor and sumps of resident basement (low pressure)
	Install groundwater interceptor/collection trench and associated underground storage tank	Install groundwater interceptor/collection trench and associated underground storage tank	Install groundwater interceptor/collection trench and associated underground storage tank
	Periodically transport collected groundwater by truck to the Oneida County POTW for treatment and discharge	Periodically transport collected groundwater by truck to the Oneida County POTW for treatment and discharge	Periodically transport collected groundwater by truck to the Oneida County POTW for treatment and discharge

Table 4 (continued)

Primoshield Site (6-33-027), Remedial Alternatives, Major Components

Alternative 1 <u>No Action</u>	Alternative 2 <u>Surface Soil Removal</u>	Alternative 3 <u>Surface Soil Cover</u>	Alternative 4 <u>Surface Soil Treatment</u>
	● Provide a long term (currently estimated at 15 years) monitoring program for the resident basement sumps and site ground-water	● Provide a long term (currently estimated at 15 years) monitoring program for the resident basement sumps and site ground-water	● Provide a long term (currently estimated at 15 years) monitoring program for the resident basement sumps and site ground-water
	● Excavate and remove contaminated soil from building floor pits, beneath floor slabs, and from below and adjacent to building foundations for subsequent off-site treatment and/or disposal	● Excavate and remove contaminated soil from building floor pits, beneath floor slabs, and from below and adjacent to building foundations for subsequent off-site treatment and/or disposal	● Excavate and remove contaminated soil from building floor pits, beneath floor slabs, and from below and adjacent to building foundations for subsequent off-site treatment and/or disposal
	● Segregate and package any RCRA listed hazardous wastes for manifesting and subsequent shipment off-site to an approved TSDF	● Segregate and package any RCRA listed hazardous wastes for manifesting and subsequent shipment off-site to an approved TSDF	● Segregate and package any RCRA listed hazardous wastes for manifesting and subsequent shipment off-site to an approved TSDF

Primoshield Site: 6-33-027
City of Utica, New York Title 3 Project
NYSDEC Region 6, Oneida County

TABLE 5 - REMEDIAL COST ESTIMATES

	<u>Alternative 1</u> <u>No Action</u>	<u>Alternative 2</u> <u>Surface Soil</u> <u>Removal</u>	<u>Alternative 3</u> <u>Surface Soil Cover</u>	<u>Alternative 4</u> <u>Surface Soil</u> <u>Treatment</u>
Capital Cost	\$5,000	\$637,000	\$422,000	\$575,000
Annual Operation & Maintenance Cost *	\$31,000	\$62,000	\$62,000	\$64,000
Present Worth of O&M Cost for 15 Years (UNO) (i=5%)	\$113,000 (30 years)	\$421,000	\$424,000	\$408,000
Total Estimated Cost	* \$118,000	* \$1,059,000	* \$845,000	* \$982,000

Notes:

- * For Alternative 1, Annual Operation and Maintenance (O&M) Costs are assumed to be required for a 30 year period. For Alternatives 2, 3 or 4, O&M Costs have been assumed to be required for a 15 year period following remedial construction.
- Cost Estimates prepared by O'Brien & Gere Engineers Inc. on January 20, 1995. Assumed interest rate = i = 5%.

APPENDIX A

ADMINISTRATIVE RECORD INDEX

Appendix A

Administrative Record Index

Primoshield Plating

Site No.: 6-33-027

City of Utica - Title 3 Project

Oneida County, New York

The following documents are included in the Administrative Record:

1. Work Plan - Primoshield Remedial Investigation/Feasibility Study (RI/FS); 1212 St. Vincent Street; Utica, New York; O'Brien & Gere Engineers Inc.; Dated: September 1992, Updated: December 1992

Also Includes:

- A. Quality Assurance Project Plan (QAPP)
 - B. O'Brien & Gere Engineers Inc. - Health and Safety Plan (HASP)
 - C. Stetson Harza - Health and Safety Plan (HASP)
2. Site History - Primoshield RI/FS; O'Brien & Gere Engineers Inc.; January 1993
3. Field Sampling Plan (FSP), Primoshield Site RI/FS, O'Brien & Gere Engineers Inc., May 1993
4. Citizen Participation Plan (CPP) for the Primoshield Site (RI/FS), NYSDEC, November 1993
5. Primoshield Site, Remedial Investigation (RI) Report, O'Brien & Gere Engineers Inc. and Harza Northeast Inc., September 1994
6. Primoshield Site, Feasibility Study (FS) Report, O'Brien & Gere Engineers Inc. and Harza Northeast Inc., January 1995

APPENDIX B

RESPONSIVENESS SUMMARY

Appendix B

Primoshield Site (#6-33-027)

City of Utica - Title 3 Project Oneida County, New York

Responsiveness Summary

This Responsiveness Summary was prepared in order to respond to the public's comments about the New York State Department of Environmental Conservation's (NYSDEC's) Proposed Remedial Action Plan (PRAP) to remediate contaminated surface soils and shallow groundwater at the Primoshield Site.

NYSDEC invited the public to comment about the proposal through a mailing to the site's contact list and at a public meeting held on February 2, 1995. This Responsiveness Summary addresses public comments received at that meeting and during the public comment period which ran from January 26, 1995 until February 27, 1995.

* * * * *

Questions and Answers from the Primoshield Site Public Meeting held from 7:00 PM to 9:30 PM on February 2, 1995 in the Utica City Office Building, 1 Kennedy Plaza, Utica, N.Y.

1. **Question**

Do the contaminants at the Primoshield site pose a health risk?

Answer

The answer to this question is yes. Risks due to exposure to hazardous waste contaminants can generally be divided into two broad classes or categories. Acute or short term risks generally produce symptoms or impacts after relatively short duration periods of exposure (e.g. seconds, minutes or hours). Chronic or long term risks generally produce symptoms or impacts after relatively long duration periods of exposure (e.g. weeks, months, or years). Prior to the USEPA Emergency Response and Removal actions completed at the Primoshield Site during 1986 and 1987, both acute and chronic risk levels from the site were very high. The actions taken by the USEPA in cooperation with the City of Utica and the State of New York very significantly reduced acute and chronic risk levels from the site. However, the actions taken by the USEPA were not intended to and did not completely reduce elevated risk levels associated with the site. Consequently, a detailed site investigation (termed an RI/FS [Remedial Investigation/Feasibility Study]) was conducted to identify and quantify remaining risk levels and to devise remedial measures or actions to reduce these remaining risks to acceptable levels.

Current risk levels on the site and adjacent to the site (although not extremely high) do exceed levels considered to be acceptable to both the USEPA and the NYSDOH (see Tables 2 and 3 in the ROD for a summary of current risk levels on and adjacent to the site). More detailed information concerning site risk levels can be found in Section 3 of the ROD and in Section 8 of the RI report. Note: Bob Griffiths of NYSDOH responded to this question at the public meeting.

2. **Question**

Does the site present a risk to neighborhood pets (e.g. such as might occur if a pet drank from ponded surface water on the site).

Answer

The answer is that under some circumstance, such as in the example provided in the question, the Primoshield site could present potential risks to neighborhood pets. In general, these risk levels are considered to be low and primarily chronic or long term. The safest approach however is to keep pets (and people) off the site until remedial measures have been completed. A fence and gate system installed at the site by the USEPA and currently maintained by the City of Utica has provided a short term solution to reducing risk levels by preventing unauthorized access to the site. Following the completion of Remedial Construction, risk levels for both humans and pets should be reduced to acceptable levels. Note: This question was also answered by Bob Griffiths of NYSDOH at the public meeting.

3. **Question**

Could or does the flow of surface water from the Primoshield site affect other properties located downgradient from the site. For example, could this flow of surface water from the site potentially affect gardens downgradient and could this be a potential route of exposure?

Answer

The short answer to this question is yes, but some explanation and clarification is also required. The detailed investigation which was conducted both on-site and in adjoining areas off-site as part of the RI has clearly demonstrated that site related contaminants have been transported from the site onto areas adjacent to and downgradient from the site. A great deal of this surface water transport likely occurred during the time when active plating operations were being conducted at Primoshield Inc. and during the time period between the shut-down of operations at Primoshield and the emergency response and removal actions conducted by the USEPA. However, because residual surface soil contamination remained on site following the USEPA emergency response and removal actions in 1986 and 1987, it is likely that some low level movement or transport of surface soil contaminants has continued to the present time. The remedial alternative selected in the ROD will remove surface soil contamination from the site and from adjacent contaminated areas. This will result in the permanent removal of this source of contamination and breaking of this exposure pathway. Currently some of the off-site soils are located in areas which have been used as gardens. Following the completion of remedial construction, these areas of surface soil contamination will have been removed

and will be replaced with clean soil materials. Bob Griffiths of NYSDOH discussed this issue at the February 2, 1995 public meeting in Utica.

4. **Question**

A question was raised if there are other PRPs (besides the City of Utica) associated with the Primoshield Site?

Answer

The answer to this question is yes. It has been known for a considerable period of time that a number of other parties were involved with the Primoshield Site during the period when it operated as a metal electroplating industrial facility (from the early 1970s until August 1985). In September 1993 the City of Utica retained the law firm Petrone & Petrone P.C. to assist in conducting a search and investigation of other PRPs for the Primoshield Site. Following the completion of the initial phase of this investigation, Notice Letters (of intent to file suit on behalf of the City of Utica) were sent to 13 additional PRPs by Petrone & Petrone P.C. in early November 1994. If this lawsuit is successful, it could potentially result in the recovery of significant amounts of City of Utica and New York State taxpayer dollars which were required to investigate and remediate residual hazardous waste contamination at this site. It should also be noted that the City of Utica became a PRP for this site when the City seized the property due to non-payment of taxes after the previous owners abandoned the property.

5. **Question/Answer**

A request was made to provide some additional degree of explanation regarding the photographic slide showing site sewer lines that was shown at the public meeting. The slide is basically a schematic of an engineering drawing for the project (Figure 24 - Sewer Plan and Surface Drainage) which shows existing sewer lines in the site area based on available historical information and data. A question was also raised regarding possible unknown buried utilities on the Primoshield Site including a possible functional sanitary sewer line on the southeast part of the Primoshield Site near St. Vincent Street. Project team members were not aware of any currently functional utilities on the Primoshield Site. Based upon this new information provided at the public meeting, additional investigations of on-site utilities will be conducted during the spring of 1995 utilizing all information

available from local residents and utility companies. This topic had been addressed in the PRAP and the ROD. An increased level of attention will be paid to this issue during Remedial Design and Construction. John Brady from Harza Northeast responded to this question at the public meeting on February 2, 1995. Figure 24 will also be updated in the future as additional information becomes available.

6. **Question/Answer**

A question was raised regarding the movement of groundwater in the shallow aquifer at the site and whether or not adequate hydrostatic (or hydrogeologic) investigations were conducted as part of the site investigation process. A significant amount of hydrologic and geologic investigation was conducted during 1993 and 1994 as part of the site Remedial Investigation (RI) process. These investigations were adequate to characterize the current condition of the shallow groundwater aquifer at the Primoshield Site. Additional detailed information regarding these investigations can be found in the Final Remedial Investigation (RI) Report for the Primoshield Site dated September 1994. See in particular "Part 2 - Study Area Investigations" and "Part 4 - Field Investigation Results". For summary information concerning shallow groundwater at the site, refer to Figures 3 and 4 in the Final Feasibility Study (FS) Report for the Primoshield Site dated January 1995 and to Table 1 in the ROD for specific chemical contaminants and corresponding concentration levels. The site groundwater monitoring wells will remain in operation during and following remedial construction to assess the effectiveness of the remedial actions taken.

7. **Question**

From historic experience with the site, neighborhood residents observed that at one time a number of small streams ran through the area. Were any of these streams found during the site investigation? Also, could these filled-in streambeds provide a route for the movement of contamination off-site?

Answer

No buried streambeds or channels were detected in the immediate proximity of the site during the site investigation (RI) program. Available maps (including USGS topographic maps of this area) indicate that the nearest buried stream channel is located at some distance from the Primoshield Site. If this buried stream channel was located closer to and

downgradient from the Primoshield Site, it could represent a potential pathway for the movement of contaminants from the site. We will continue to monitor this situation during Remedial Design and Construction and will make changes as necessary if new information becomes available regarding this issue.

8. **Question**

Why wasn't the old laboratory structure demolished and removed during the RI program? It poses a fire hazard, lowers property values and raises insurance costs for adjacent businesses.

Answer

The impact of the existing Primoshield Site structures (including the laboratory structure) on the neighborhood and adjacent properties is recognized by the City of Utica, New York State Department of Health and New York State Department of Environmental Conservation. Serious consideration was given to removing both the laboratory building and the office building as an Interim Remedial Measure (IRM) during the Remedial Investigation program at the Site. After extensive consideration, it was determined that an early removal of these two building would increase the cost and schedule for the overall remediation of the site. Consequently, it was determined that the remediation (including demolition) of these buildings could best be accomplished as part of the overall RI/FS site remediation process.

9. Also included in the Responsiveness Summary are the following letters:

- a. Letter from: Ms. Gail Rodriguez to: Mr. John Zegarelli, Utica City Engineer, dated January 31, 1995. Ref. Primoshield Site.
- b. Reply letter from: Mr. John Zegarelli, Utica City Engineer, to: Ms. Gail Rodriguez dated March 2, 1995; and
- c. Memorandum from: Mr. Donald E. Weimer City of Utica, Board of Water Supply, to: Mr. John Zegarelli, Utica City Engineer, dated January 31, 1995. (See previous Question and Answer No. 5 for a response to this Memorandum.)

January 31, 1995

John Zegarelli, City Engineer
City of Utica, Dept. of Engineering
City Hall
1 Kennedy Plaza
Utica, N.Y. 13502

RE: Primoshield Site Harza No. 6057

Dear Mr. Zegarelli:

After reviewing the proposed remedial action plan you mailed to me on 1/27/95, I have several comments and continued concerns

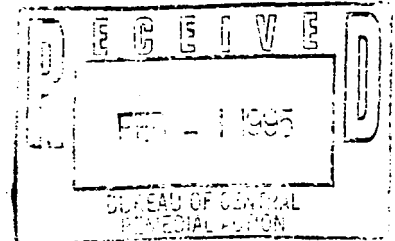
It appears that "Alternative 2" Surface Soil Removal is the ONLY alternative acceptable of the four presented.

Alternative 2 addresses the soil removal, sewer lines removal and associated contaminated soil removal. However, the waterlines feeding my home do not appear to be addressed. I also question the thorough cleaning via pressure wash and rinse of my basement walls, floor and sumps. Given the age and apparent porousness of the basement walls, I can't believe a thorough cleaning is possible or that pressure washing and rinsing wouldn't weaken, if not collapse the existing basement walls.

I believe the removal of the basement walls and floor and contaminants present in waters and soil, and replacing with new materials, the floor and walls would be the acceptable alternative. I also feel this may very well be more cost effective than the proposal in alternative 2. The "new" walls and floor should subsequently be sealed as suggested in the action plan.

Continued monitoring of the soil and ground waters as well as air quality inside and outside of the surrounding properties is necessary subsequent to the "clean up". The results of the monitoring should be made available to the surrounding and effected property owners.

Health concerns are first and foremost on my mind and living in the residence immediately adjacent to this site is a DAILY



worry. My family has been exposed in excess of 10 years to the hazards not limited to lead and cyanide!! Future health problems are a major concern for us as well as the fact that my home is monetarily worthless and has been since 1985 when this situation was recognized.

I anticipate that IF the "clean up" project is "successful" and monitoring proves favorable results, my house would be deemed "liveable". However, I sincerely doubt that resale of my home would be successful in my lifetime and possibly longer.

I would expect this would be considered in the tax assessment of my property for the past ten years and in the future. I would also expect that monetary consideration for this tragic situation would be made to myself and my husband at very least.

I will close this letter with the belief that this health hazard and eyesore will finally and expeditiously be rectified.

Sincerely,

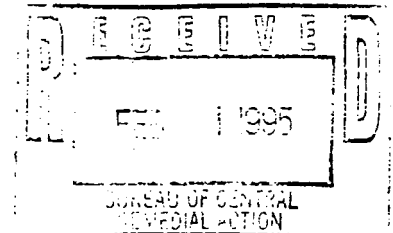
Gail Rodriguez

Gail Rodriguez
1208 St. Vincent Street
Utica, N.Y. 13501
315-733-2457

cc: Jim Reagan, P.E.
NYSDEC, Div. Haz. Waste Remediation
50 Wolf Road
Albany, N.Y. 12233-7010

Robert Griffiths
NYSDOH, BEEI
2 University Place
Albany, N.Y. 12203-3313

Louis LaPolla, Mayor
City of Utica
1 Kennedy Plaza
Utica, N.Y. 13502





CITY OF UTICA

1 Kennedy Plaza • Utica, New York 13502

Department of Engineering

315-792-0152

LOUIS D. LaPOLLA, Mayor

JOHN L. ZEGARELLI
City Engineer

March 2, 1995

Ms. Gail Rodriguez
1208 St. Vincent Street
Utica, New York 13501

**RE: City of Utica, New York-Title 3 Project;
N.Y.S.D.E.C. Region 6, Oneida County Primoshield Site,
Remedial Investigation/Feasibility Study (RI/FS)
Site Code 6-33-027**

Dear Ms. Rodriguez:

Acknowledge receipt of your letter dated January 31, 1995 outlaying your concerns regarding the Primoshield Site Remedial Investigation/Feasibility Study and Proposed Remedial Action Plan. Your letter was referred to New York State Department of Environmental Conservation, New York State Department of Health, O'Brien & Gere Engineers and Harza Northeast Engineers for their comments and response.

The following response is a consensus of opinions from all parties:

1. The following discussion relates to issues raised in paragraph no. 3: Residential water lines were not addressed in the PRAP, because at this time, there is no evidence to indicate that any existing residential water lines are being impacted or affected by the Primoshield Site. Also, all of the residences in this area of Utica are currently serviced by the City of Utica water supply system. All of the lateral connections from the street water mains to the individual homes operate under conditions of significant positive pressure which would also serve to prevent any contamination (if present) from entering or contacting any parts of the water supply system. Also, as a point of clarification, the only sewer lines which are currently proposed for removal are the existing sewer lines on the Primoshield property itself. If any of these site sewer lines are currently active, some sewer line separation may also be required.
2. As noted in the letter, the PRAP currently recommends cleaning via pressure wash and rinse of the walls, floor, and sumps of the basement of the 1208 St. Vincent Street residence. The owners expressed some concern that the pressure involved in this cleaning process could possibly damage the existing structure. No specific pressure level is specified in the PRAP.

This level of detail is not appropriate for the PRAP. It is, however, appropriate for the design documents and that level of detail will be specified in those documents. To clarify the record, it was never the intention to utilize high or very high pressures in this cleaning process for the residential basement. A low pressure or moderate pressure wash and rinse process for the basement walls, floor and sumps was originally intended for the proposed residential basement cleaning. This original concept has not changed. Pressures used for this cleaning process will be well below levels which could cause damage to the existing structure. Also, during Remedial Design and prior to the implementation of Remedial Construction, the property owners will be consulted regarding the specific details of the proposed cleaning process. Any remaining concerns of the property owners will be resolved at that time, to the maximum extent practical. Also, efforts will be made to keep the neighboring property owners fully informed throughout the entire site remediation process. Finally, if any damage is inadvertently done to any of the neighboring properties during Remedial Construction; it will be the responsibility of the City of Utica to repair this damage as part of the site Remedial Construction.

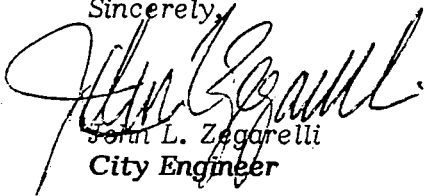
3. Based upon the information currently available to us, we do not believe that the floor and walls of the basement at the 1208 St. Vincent residence require replacement. Current laws and fiscal constraints (including the 1986 Environmental Quality Bond Act (EQBA) prohibit the expenditure of funds not directly required to remediate contamination from inactive hazardous waste sites.
4. Additional testing (monitoring) of surface soils will be required during site Remedial Construction to ensure that all soils which exceed site clean-up criteria are removed for appropriate off-site disposal. It is not possible to know in advance precisely how long it will take to remediate the very limited shallow contaminated groundwater plume at the site. It has been estimated in the PRAP, that approximately 15 years will be required to remediate groundwater at this site, and this estimate is probably conservative. Monitoring of groundwater will continue for as long as groundwater remediation is required at the site. All of the site data (including all testing and monitoring results) are now and will in the future be available to the neighboring homeowners and to the public in general.
5. Health concerns or issues related to this site have been discussed in a fairly detailed manner in the Primoshield Site PRAP dated January 26, 1995 (see Section 4 for additional information regarding potential human health impacts). A very detailed discussion of site health risks can be found in Section 8 - "Risk Assessment" of the September, 1994 Remedial Investigation (RI) Report. Also Bob Griffiths and other staff from the New York State Department of Health office in Albany are available to discuss health issues related to the site with neighbors and other interested persons at any time.

Ms. Gail Rodriguez
March 2, 1995
Page 3

6. Issues such as property values (or sale) and property tax assessment are outside of the scope of the State's inactive hazardous waste site remediation program. Nevertheless, we do recognize the impact of these factors on property owners near the site. The City of Utica does have a tax assessment grievance procedure. Grievances can be filed annually with the City Assessor's office. I suggest you contact the City Assessor for the specific grievance procedures and the period when grievances can be filed.

I hope that all of the above answers your concerns. We are always available to answer any of your questions. Please contact me at your earliest convenience with any additional questions or concerns.

Sincerely,



John L. Zegarelli
City Engineer

JLZ:dk

cc: Jim Reagan, N.Y.S.D.E.C.
Jeff Banikowski, O'Brien & Gere
John Brady, Harza Northeast
Robert Griffiths, N.Y.S.D.O.H.
Louis Petrone, Petrone & Petrone P.C.
Louis D. LaPolla, Mayor
Joseph Hobika, Corporation Counsel



Give F.S. File
C.F. File

Board of Water Supply

City of Utica

ONE KENNEDY PLAZA • POST OFFICE BOX 345 • UTICA, NEW YORK 13503
TELEPHONE (315) 792-0301

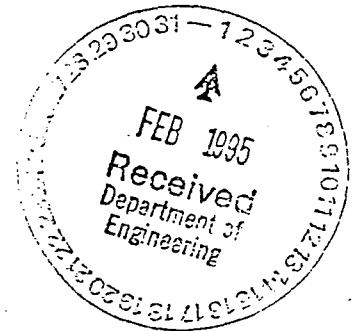
M E M O R A N D U M

TO: John Zegarelli, Secretary
Board of Contract and Supply

FROM: Donald E. Weimer *Don Weimer*
Principal Engineer

DATE: January 31, 1995

RE: Bosserts Manufacturing and Primoshield Sites
Water Service Lines



As the City nears action to implement excavation and removal of contaminated soil and ground water from the Bosserts and Primoshield sites, it is strongly recommended that you include within the contract scope of work the disconnect and capping of the still active water service lines into these sites.

Any waterline subject to a "backflow condition" could cause contaminated ground water to flow back into the public water supply, unless the recommended disconnections are accomplished.

Thank you for your attention/^{to} these matters.

DEW/sdw

cc: Robert M. Pierce