

Declaration Statement - Record Of Decision

McInerney Farm Site

(Remington Rand Mach. Div. of Sperry Rand and Chemung Correctional Facility)

Southport, Chemung county, New York

STATEMENT OF PURPOSE:

This Record Of Decision(ROD) sets forth the selected Remedial Action Plan(RAP) for the McInerney Farm(Farm) site which comprises of Remington Rand Mach. Div. of Sperry Rand(RRMDSR) and Chemung Correctional Facility, currently known as Southport Correctional Facility(SCF), - two sites listed in the registry of Inactive Hazardous waste Disposal Sites in New York State. The RAP was developed in accordance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1986, and the New York State Environmental Conservation Law(ECL). The selected RAP complies to the maximum extent practicable with the National Oil and Hazardous Substance Pollution Contingency Plan(NCP)-40 CFR Part 300, of 1985 as revised in 1990.

STATEMENT OF BASIS:

This decision is based upon the Record of the New York State Department of Environmental Conservation(NYSDEC) for the Farm site(RRMDSR & SCF) and upon public input to the proposed Remedial Action Plan(PRAP) presented by the NYSDEC. A copy of all pertinent documents is on file at the Southside Branch of Steele Memorial Library, 378 South Main Street, Elmira, New York and at the Regional office of the NYSDEC - 6274 East Avon-Lima Road, Avon, New York. A bibliography of the documents included as part of the record is given under the Executive Summary for the RAP.

DESCRIPTION OF SELECTED REMEDY:

The selected RAP for the RRMDSR site(northern half of the Farm site) has been developed to be protective of public health and the environment, is technically feasible and it complies with statutory requirements. Briefly, the selected RAP includes the following:

- Excavation of contaminated waste/soil in compliance with the set soil clean-up goals. Confirmatory sampling will be used to verify the clean-up. Excavations will be backfilled with clean fill imported from outside the disposal area.
- Placement of one foot of clean soil cover in areas where surface soil Polychlorinated Biphenyl(PCB) levels exceed one milligrams per kilogram(mg/Kg).
- Off-site treatment of waste/soil and disposal. The exact method of treatment and the treatment, storage and disposal facility to be utilized will be further

delineated during the design phase.

- Environmental enhancement and site restoration will be accomplished by reburial of inert solid waste object like concrete, wood and asphalt roofing visible at the surface. Visible metal containers will be collected and removed off-site for disposal. Localized filling and regrading will also be done to eliminate abrupt changes in relief and encourage run-off.
- Institutional access control which would require approval of the NYSDEC prior to conducting specific activities that may disturb the integrity of the site.
- Limited post-removal groundwater monitoring. This will include three rounds of sampling over a five year period after the completion of the remedial action.

No remedial action is planned for the Chemung(Southport) Correctional Facility site(southern half of the Farm), as the drum/soil removal was completed in 1987-88 and subsequent RI has not revealed any further environmental problems. The next step for this site would be to initiate the process of removal(delisting) of the site from the registry of Inactive Hazardous Waste Disposal sites in New York State.

The next step in the remedial process for the RRMDSR site will be to initiate the Remedial Design/Remedial Action(RD/RA) process.

DECLARATION:

The selected RAP is protective of human health and the environment. The remedy selected will meet the substantive requirements of the Federal and State Laws, Regulations and Standards that are applicable or relevant and appropriate to the remedial action. The remedy will satisfy the statutory preference for remedies that employ treatment that reduces toxicity, mobility or volume as a principle element. Minor increase in short-term risk to the workers involved in the implementation of the remedial action will be minimized by careful site management and appropriate monitoring. On long-term basis, removal of the waste will result in a permanent solution that will enable the site to continue to be used for recreational purposes with no significant impact to long-term human use or natural habitat. NYSDOH concurs with the RAP.

3-25-92

Date



Edward O. Sullivan



STATE OF NEW YORK DEPARTMENT OF HEALTH

Center for Environmental Health

2 University Place

Albany, New York 12203-3399

Lorna McBarnette
Executive Deputy Commissioner

OFFICE OF PUBLIC HEALTH

March 20, 1992

Sue Kelly
Executive Deputy Director
William N. Stasuk, P.E., Ph.D.
Center Director

Mr. Michael J. O'Toole, P.E., Director
Division of Hazardous Waste Remediation
NYS Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

RE: McInerney Farm Site
(T) Southport, Chemung County
Site ID Nos. 808005/808020

Dear Mr. O'Toole:

My staff has reviewed the draft Record of Decision (ROD) for the McInerney Farm Site in the Town of Southport, Chemung County. The selected remedial alternative includes the excavation of contaminated soils, the off-site treatment and disposal of the contaminated soils, site access restriction, limited post-removal groundwater monitoring, and environmental enhancement and site restoration. We concur with the decision as it is protective of human health. After the ROD has been signed by the Deputy Commissioner, please provide me with a copy. In addition, when the work plan for the design and construction phase of the project becomes available, please forward a copy for review by my staff.

Sincerely,

G. Anders Carlson, Ph.D.
Director
Bureau of Environmental Exposure
Investigation

jlf/20780265

cc: Mr. Wakeman
[Redacted]
Dr. Smith-Blackwell - WRO
Mr. Napler - RFO
Mr. Balland - CCHD
Mr. Belmore - DEC
Mr. Harris - DEC
Mr. Khalil - DEC, Reg. 8

MCINERNEY FARM SITE

(Remington Rand Mach. Div. of Sperry Rand
and Chemung Correctional Facility)

Site No. 808005 and 808020

RECORD OF DECISION

March 1992

Prepared by:

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation

REMEDIAL ACTION PLAN

EXECUTIVE SUMMARY

Statement of Purpose:

This document describes the remedial alternatives considered for the former McInerney Farm (Farm) site and identifies the New York State Department of Environmental Conservation's (NYSDEC) remedial alternative, developed in accordance with the New York State Environmental Conservation Law (ECL) and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC Section 9601, et., seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). The documents that comprise the Administrative Record for the site include the final Remedial Investigation and Feasibility Study (RI/FS) reports, the Proposed Remedial Action Plan (PRAP) and Responsive Summary. The documents in the Administrative Record are the basis for the selected remedial action.

This document provides some background information on the Farm site, briefly describes the alternatives which were considered to remediate the site and presents the Department's Remedial Action Plan (RAP). For a detailed description and evaluation of the alternatives considered, the RI/FS reports mentioned above should be consulted.

Site Name and Location:

McInerney Farm site (includes Remington Rand Mach.; Div. Sperry Rand and Chemung Correctional Facility - NYSDEC Registry Sites)
Town of Southport
Chemung County, New York
Site Code: 808005 & 808020
Funding Source: Responsible Party

Assessment of the Site:

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action described in this Remedial Action Plan (RAP), present a current or potential threat to public health, welfare, and the environment.

Statement of Basis:

This proposal is based upon the administrative record for the Farm site. A copy of the record is available for public review and/or copying at the following locations:

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation: M. D. Mehta
6274 E. Avon-Lima Road, Avon, NY 14414
Hours: 8:30 A.M. - 4:45 P.M. Monday-Friday (716)226-2466

Southside Branch of Steele Memorial Library
378 South Main Street
Elmira, NY 14901
Hours: Monday, Wednesday and Thursday: 12 Noon to 5:00 P.M.
Tuesday and Fridays: 9 A.M. to 5:00 P.M.

Documents are also available for public review at the NYSDEC Region 8 office at 6274 E. Avon-Lima Road, Avon, NY 14414. The office is open from 8:30 A. M. to 4:45 P. M. Monday through Friday, contact M. D. Mehta at (716)226-2466.

The following documents are the primary components of the administrative record:

- °Dames & Moore - Final Feasibility Study - McInerney Farm site January 1992;
- °Dames & Moore - July 17, 1991, Action Plan Items: McInerney Farm site, October 1991;
- °Dames & Moore - Round 4 Sampling and Analysis Report - McInerney Farm site, May 1991;
- °Dames & Moore - Round 4 Sampling & Analysis Plan: McInerney Farm site, December 1990;
- °Dames & Moore - Remedial Investigation Report: McInerney Farm site, December 1989;
- °Dames & Moore - Management Plan Remedial Investigation, McInerney Farm site, March 1988; and its addition/modification correspondence dated September 14, 1988 and October 26, 1988.
- °Dames & Moore - Preliminary Site Assessment: McInerney Farm site, March 1988.
- *NYSDEC - Proposed Remedial Action Plan: McInerney Farm site
- *NYSDEC - Responsiveness Summary: McInerney Farm site

Summary of Government's RAP:

The selected remedy for the Remington Rand Mach. Div. Sperry Rand(RRMDSR) site, the northern half of the Farm site(Figure 4), **Alternative 6**, consists of excavation and removal offsite of contaminated waste/soil for treatment at a Treatment Storage & Disposal(TSD) facility with site restriction and limited post-removal groundwater monitoring.

Due to land disposal restrictions, it is probable that the waste/soils would be combusted in a permitted incineration facility or treated prior to disposal in a permitted, secure landfill. Non-hazardous industrial waste excavated will be transported to a permitted off-site disposal facility for disposal. The exact methods of handling the waste/soil at the TSD facility will be further delineated during the next (design) phase of the site remedial program. Under Alternative 6, the contaminated waste/soils contributing significantly to human health risks would be removed and thus, residual risk present at the site would be minimized. The present worth cost of the proposed remedial program is estimated at approximately \$4.9 million based on data currently available and assuming the excavated material will be hazardous and will require treatment.

No remedial action is planned for the Chemung Correction Facility site, now known as Southport Correctional Facility (SCF), located on the southern half of the Farm site. The drum/soil Removal Action was completed at the SCF site during prison construction in 1987-88 and the subsequent RI did not reveal any further buried waste or other environmental problem. Based on this, the next step for the SCF site will be to initiate the process of removal (**delisting**) of the site from the registry of Inactive Hazardous Waste Disposal sites in New York State.

Groundwater, surface waters, and other environmental media are not impacted by the Farm site.

Section 1: SITE LOCATION AND DESCRIPTION

The RRMDSR site (NYSDEC ID #808005) and SCF site (NYSDEC ID #808020) are two contiguous sites located in the Town of Southport, Chemung County, New York (Figure 1). These sites were simultaneously investigated under a common name, McInerney Farm Site - named after the former owner of this 70 acre farm. The Farm Site is located approximately 0.5 mile southeast of the intersection of State Routes 14 and 379 in the Town of Southport. The Farm Site was reportedly used between the 1940s and 1967 for disposal of waste materials. Remington Rand Corporation (Sperry Rand being the successor) acquired the site property in 1952. The precise history of disposal activities regarding generators of wastes, types and quantities is not well documented. However, it is known that approximately 70 drums and 3,000 cubic yards of PCB contaminated soils were excavated and removed for appropriate disposal by the NYS Office of General Services (OGS) from the southern half of the Farm Site (SCF) between 1987 and 1989 during the construction of the Southport prison.

The Farm Site lies at about elevation 850 National Geodetic Vertical Datum (NGVD) in the broad, flat-bottomed valley of a small river, Seeley Creek, which flows in an easterly direction through the northern part of the site. A flood control levee constructed by the U. S. Army Corps of Engineers in 1949 borders the northern site boundary. Overall, surface gradient drops by less than one percent in an easterly direction, parallel to the river. Sand and gravel mining operations, waste disposal practices, and more recently, earthworks associated with construction of the prison, have locally steepened the natural grade in some areas of the site. South of the Farm Site, the ground rises steeply at about 60 percent by over 550 feet (Figure 1).

North of Seeley Creek, the Farm site is accessible by dirt roads over the levee from State Route 379; south of the creek access is from State Route 14 via Institution Road, a newly constructed road, which terminates in a circle near the northeast corner of the prison (Figure 3).

On the north side of Seeley Creek, between the creek and the levee, the ground is about 5 to 8 feet higher than the adjacent properties. Vegetation in this area is mostly deciduous (trees that lose their leaves in the autumn) woodland. Rusted steel cans and drums project out of the ground surface in several places. A dark gray ash-like deposit is visible in some locations. Near the northwest corner, other waste materials, such as wood, brick, steel parts, and tanks are exposed.

A deciduous woodland area occurs on the south side of Seeley Creek between the creek and the prison. Within this area, the ground surface is uneven and shows signs of former disturbance. A mound of earth about 4 to 5 feet in height and 40 to 50 feet in length tends in an east-west direction parallel to a 3 to 4-foot-deep ditch through part of this area. Rusted steel drums and cans are exposed at the ground surface at several locations. Numerous 2- to 3- foot-high mounds occur in the eastern part of the wooded area. These mounds have the appearance of insulated asphalt roofing material. A gray ash-like deposit is visible at the ground surface in some areas.

West and south of the wooded area on the south side of the creek, the Farm site has been extensively modified by construction activities associated with the new prison.

Gravel and topsoil have been removed from some areas and placed in others.

An inactive licensed post-flood demolition landfill known as the South Mountain Demolition Disposal Area is located immediately west of the Farm Site. The area licensed for this landfill which was operated in the mid-1970s extended onto the Farm Site; however, visual observations indicate the actual area of disposal was limited to an area immediately west of the Farm Site. Sand and gravel products are currently being mined immediately west of the demolition landfill. An inactive municipal landfill, currently operated as a transfer station by the Town of Southport, is located about 0.7 mile west of the farm site. The inactive municipal landfill is located adjacent to South Creek which is a tributary to Seeley Creek. South Creek joins Seeley Creek about 700 feet upgradient of the farm site.

Section 2: SITE HISTORY AND PREVIOUS INVESTIGATIONS

This 70-acre Farm Site was purchased by Michael McInerney in 1925. Remington Rand, Inc. acquired this property in 1952.

Sperry Rand became the successor during 1955-67. The site was not used as a disposal area since 1967.

The Farm Site is believed to have been used for agricultural purposes up until about the 1940s when the dumping appears to have begun. A 1955 aerial photograph shows two areas of surface disturbance existed at the site at this time; one north of Seeley Creek and another south of Seeley Creek; Aerial photography taken in 1964 indicates that the same two areas had been expanded and were still active at that time. Near the east property line,

the aerial photography indicates the existence of an open trench. Three linear features are also visible further to the south. A path or road extends southward along the western boundary of the Farm Site, terminating in a circle before reaching a wooded area.

In the early years, the RRMDSR site was reportedly used for disposal of oily waste, wood pallets, paint wastes, metal chips, coal ash, and possible some plating wastes. In later years, it was just used for coal ash. In 1983, the RRMDSR disposal area was listed by NYSDEC in the Registry of Inactive Hazardous Waste Disposal Sites in New York State (ID #808005).

On March 24, 1987, NUS Corporation submitted a potential hazardous waste site preliminary assessment report to the U. S. Environmental Protection Agency (USEPA) for the RRMDSR disposal area, northern half of the Farm site. The report places the disposal area on both the north and south sides of Seeley Creek. The report determined the main hazard resulting from the disposal area was direct contact with the waste materials. There was a slight potential for drinking water contamination, but the number of people potentially affected was limited. The disposal area was rated as "low" on the priority for inspection. Toxic solids, powders and liquids containing oily waste, solvents, and heavy metals were noted as being located at this disposal area.

Until the NYS OGS contractor encountered waste materials in July 1987, when excavating for utilities for the Southport prison, there had been no previous examination or testing of waste materials at the Farm site. When the wastes were encountered at the SCF site, New England Pollution Control Company (NEPCCO) was contacted by Dick Corporation (NYS OGS contractor) to remove the waste materials. One of the drums excavated, which was found to contain lard, bore the name Remington Rand. Thereafter, Unisys was contacted by the State of New York and was informed of the situation.

From July 30, 1987, to August 3, 1987, NEPCCO excavated and removed waste materials from the SCF site. The waste materials were moved to a staging area constructed on the north side of Institution Road.

Because of the delay to construction, recommendations to reroute or redesign utilities in the affected area were made. Redesign recommendations included explosion-proofing electrical conduits, upgrading materials, taking special precautions at joints, and use of cutoff trenches along utility lines to prevent migration of contaminants. The NYSDEC listed the disposal area where the waste

materials were encountered-SCF, in the registry of Inactive Hazardous Waste Disposal Sites in New York State (ID #808020). The entire stockpile of contaminated soils in the staging area was sampled by NYSDEC and found predominantly contaminated with elevated levels of PCBs (Polychlorinated biphenyls). When it was determined that Unisys was unwilling to participate in the disposal of the drums/soil stored in the staging area, NYSOGS hired a professional contractor to do the job. A total of about 70 drums and 3000 cubic yards of PCB contaminated soil/debri was removed from the staging area to Cecos International in Williamsburg, Ohio and SCA Chemical Services in Model City, New York for treatment and disposal in the fall of 1988. The approximate cost of transportation and treatment/disposal was \$900,000.

Meanwhile, Unisys had already expressed its willingness to conduct site investigation for the entire Farm Site (RRMDSR & SCF). The Consent Order (legal agreement) negotiations had started in the Fall of 1987. Due to the urgency of the prison construction, Unisys was directed by NYSDEC to conduct a preliminary site investigation in the Winter of 1987-88. In March 1988, while the negotiations to conduct an RI/FS continued, Dames & Moore (Unisys's consultant), submitted a Preliminary Site Assessment (PSA) report for the Farm Site. A draft Work Plan for the RI/FS was also submitted at the same time. The PSA report was based on literature review and the conduct of some preliminary non-invasive field work which included aerial photography, geophysical studies, and a soil vapor survey. No buried metal containers were detected at the SCF site during PSA. The contents of the PSA have been embodied into the RI report. The Consent Order for the RI/FS was signed in December of 1988.

Review of the PSA indicated three disposal areas to have existed at the Farm Site (Figure 2):

- °North of Seeley Creek
- °Near the South side of Seeley Creek
- °Within the prison area

Section 3: CURRENT STATUS

REMEDIAL INVESTIGATION:

The RI for the Farm site was performed in accordance with the Workplan dated March, 1988, and revisions thereto. The field and laboratory testing were aimed at characterizing site conditions, locating and characterizing wastes buried onsite, and evaluating the impact on the surface or subsurface environmental media. The specific set of tasks performed to accomplish these goals were as follows:

1. Topographic survey
2. Geophysical surveys
3. Soil vapor survey
4. Test Pits
5. Borings/well installations
6. Sampling and laboratory analyses

The first three items were completed under the PSA earlier in March, 1988, as mentioned above. Aerial photography was used in completing the topographic survey. The geophysical survey included magnetometer, electromagnetic survey, and the Ground Penetrating Radar. The soil vapor survey was conducted using KV Analytical Systems soil/gas probe with the Hnu photoionization analyzer.

TEST PITS (TP)

Using the information provided by the air photography, soil vapor survey and geophysical surveys, 15 test pits were excavated in potential waste disposal areas to evaluate the nature of the waste materials, relative to type and quantity and their effect on the surrounding soils. The test pits allowed observation of physical characteristics of the soils in which the wastes were encased and determination whether the wastes were buried above or below the water table. Two test pits were excavated at some locations to assess the variability of the waste materials based on geophysical and topographic observations. In these areas the second test pit was given the suffix "A". The test pits were backfilled with the materials removed from the excavations and covered with imported granular soil fill material.

The test pits were excavated by Clean Harbors of Syracuse, NY using a rubber-tired backhoe capable of excavating to depths of between 15 to 20 feet below the ground surface. The arm, bucket and other portions of the backhoe coming in contact with potentially contaminated soil were steamed cleaned between test pits.

Information recorded in the field during excavation of the pits is provided in Appendix E of the RI Report.

BORINGS/WELL INSTALLATIONS

Ten soil borings were conducted by Empire Soils of Gorton, NY to characterize the subsurface stratigraphy and provide boreholes for installation of monitoring wells. After completion of each boring, a monitoring well with a 20-foot screen was installed.

The boring locations were selected based on the anticipated regional ground water flow direction (primarily west to east), the

probable location of buried wastes, soil vapor survey results, test pit results, and location of prison utility lines.

The soil borings provided information on types of soils present, soil stratigraphy, depth to ground water, and samples for estimating the permeability of the soils. The borings were advanced using hollow-stem augers. No additives (including bentonite) to make drilling mud were permitted. During the drilling process, soil samples were taken using a standard 2-inch OD split-barrel sampler according to Standard Penetration Test Test Method, ASTM D-1586. Sampling was performed continuously for the full depth of the borehole. Measurement of ground water levels was performed at a minimum when saturated soil was first encountered and at the completion of the boring.

A log of each boring was prepared that included a description of the soils encountered (color, texture, moisture, and consistency), any unusual conditions encountered (soil odor, artesian head on water, loss of water in borehole), and information about the subsequent well installation. The soil samples taken during the drilling were sealed with aluminum foil and labeled in glass jars for volatile organic measurements with a photoionization detector in a stable environment. Six split-spoon samples were analyzed for grain-size distribution.

Monitoring wells ranged about 25 to 30 feet in depth. The water table was about 5 to 15 feet below the ground surface. Because regional seasonal fluctuations in the water level are reported to be 8 to 12 feet, a 20-foot section of screen was used for the monitoring wells, and the top of the screened section was 2 to 5 feet above the water level encountered while drilling the boring. The wells consisted of 2-inch I.D. PVC(Poly Vinylchloride) slotted screens and risers set in a quartz sand packing. The elevation of the top of each well casing was surveyed and tied to the National Geodetic Vertical Datum (NGVD). The above-ground portion of each well was encased with a lockable, steel protective casing set in concrete.

The monitoring wells were developed until the water reached 50 Nephelometric Turbidity Unit(NTU) to obtain clean representative samples. The method used for development consisted of surging and over-pumping. Surging was performed concurrently with over-pumping until the return water was free of sediment. In surging, a plunging effect was created by working a 1-inch diameter foot valve up and down across the screened interval thus creating a washing action in the sand pack. Fines were drawn into the well through the screen and lifted out with the water as the well was pumped. Over-pumping was used as a final development step to build up a filter in the sand pack and remove silt and fine sand grains from

the well water.

Monitoring wells MW1, MW2, MW3, MW4, and MW5 were selected as upgradient wells near the western McInerney property boundary (Figure 3). Monitoring wells MW6, MW7, MW8, and MW9 were selected as downgradient wells located near the eastern McInerney property line to evaluate whether contaminants were migrating off the site area. Monitoring well MW10 provided a sampling point between the north and south, disposal areas near Seeley Creek. Monitoring well MW5 provided data for evaluating direction of ground water flow in the southern part of the study area. Monitoring wells MW2 and MW3 were located downgradient of a post-flood demolition disposal area (Figure 3).

Three rounds of water level data were obtained from the monitoring wells. The locations of test pits, monitoring wells and the surface soil sampling areas are shown in Figure 3.

SAMPLING & ANALYSES

Samples of waste materials and environmental media were collected during three rounds of sampling for laboratory testing. A sampling and analysis schedule is provided in Table 1. Copies of the sample data forms are provided in Appendices H, I, and J. A summary of the number of samples collected and analyses conducted is provided below.

Nanco Laboratories (NANCO) of Wappingers Falls, NY, was selected to perform the chemical analyses on the samples collected in Rounds 1 and 2. Cambridge Analytical Associates (CAA), a second, independent laboratory, was selected to perform analyses on selected replicate samples in these first two rounds. Galson Technical Services of East Syracuse, NY, performed the Round 3 analyses on sediment samples.

The samples collected were tested for volatile and semivolatile organic compounds, pesticide/PCBs, and inorganic compounds on the Target Compound List (TCL) in accordance with the NYSDEC Contract Laboratory Protocol. Waste samples were additionally tested for RCRA corrosivity, ignitability, reactivity, and EP-toxicity heavy metals according to 40 CFR 261. Aqueous metals analyses were conducted on whole samples and field-filtered samples for a comparison of total and dissolved constituents. Data validation was performed by Environmental Standards, Inc. of Valley forge, PA in accordance with the NYSDEC requirements and "Functional Guidelines for Evaluating Organic and Inorganic Analysis (USEPA, 1988). Data were examined to determine the usability of the analytical results and also to determine contractual compliance relative to requirements and deliverables under Environmental Protection Agency (EPA)'s Contract Laboratory Program (CLP).

ADDITIONAL INVESTIGATIONS:

1. As a result of review of the RI report by the New York State Department of Environmental Conservation and New York State Department of Health, several inadequacies were identified requiring additional field work for site investigation. The main objectives of the additional investigation were:

- Resampling required as identified by QA review of the analytical data generated during the RI;
- Sampling of soil/waste materials to determine the extent of contamination with respect to the field screening criteria set up for investigative purposes.

To accomplish these objectives, in December 1990, Round 4 Sampling and Analysis Plan for the farm site was submitted by Dames & Moore. Field work was conducted during Winter-Spring 1991; and the report was submitted in May, 1991.

2. A meeting was held on July 17, 1991, with Unisys Corporation and their consultants to discuss the RI Report and the additional investigation. At the conclusion of the meeting, it was agreed by Unisys to conduct:

- Round 5 and Round 6 Sampling & Analysis
 - Groundwater Sampling & Analysis
 - Surface soil and test pit sampling and analysis
- Nickel Inhalation Risk Assessment
- Remedial Cost Analysis

The report on the July 17, 1991, actions items was submitted by Unisys in October, 1991.

The RI was considered complete in November, 1991.

RESULTS OF REMEDIAL INVESTIGATION:

WASTE/SOIL:

Fifteen test pits were dug using backhoe at the site during Round 1 of the RI. Locations of these pits are shown in Figure 3. Four test pits, TP-1, TP-2, TP-3, and TP-4 dug at the southern half of the Farm-SCF site, did not show signs of disposal of waste materials. The remaining pits excavated in the northern half of the Farm-RRMDSR site, indicated the presence of some waste and fill materials.

Volatile organic chemicals were detected in the waste in most of the test pits on the northern half of the site. However, levels were the highest in TP-6 and TP-11, where saturated and unsaturated hydrocarbon concentrations were measured for TP-6 at 3,600 milligrams/Kilogram(mg/kg) in the tar-like and slag substances tested from buried drums. Levels of saturated (10 mg/kg), unsaturated (3mg/kg) and cyclic (20 mg/kg) hydrocarbons were detected in TP-11 at 4 to 5 feet depth.

Semivolatile organic chemicals were detected in most of the test pits. Concentrations of target compounds in general are the highest in TP-8, on the order of 2.8 mg/kg. In addition, several drums were removed from TP-6, having concentrations of tentatively identified compounds up to 2,800 mg/kg.

Sampling of the waste/soils indicates the presence of low levels of pesticides. A maximum concentration of pesticides (0.285 mg/kg) was measured in the sample from TP-6 at 1 to 3 feet. Maximum concentrations of PCBs detected was 5,200 mg/kg as measured in TP-12 at 1 to 3 feet depth.

Sampling results for inorganics in the test pits and excavated drums showed a high degree of variability. Concentrations in many pits were measured at background levels; some showed elevated levels.

Samples of waste in the test pits and drums were tested for EP toxicity. All readings were less than 1 milligrams/liter(mg/l) with the exception of one sample from TP-10A, which registered 4.02 mg/l cadmium. Flashpoint, reactivity, and corrosivity tests carried out on samples from the same locations also showed negative for these hazardous waste characteristics.

Based on the results of the Round 1 sampling and analysis, TP8, TP9, TP10A and TP12 were identified as waste/soil areas requiring further evaluation in Rounds 4 and 5 sampling and analyses for cadmium, lead, nickel or PCBs. In these rounds split spoon waste/soil samples were collected for analysis from borings conducted on a grid pattern around each test pit location in accordance with USEPA guidelines.

A summary of the locations where elevated levels of cadmium, lead, nickel or PCBs were detected in Rounds 1, 4 and 5 is provided in Table 1.

SURFACE SOILS:

Six composite surface soil samples, each comprising 3 to 5 subsamples, were collected in Round 2 from disposal areas on the north and south sides of Seeley Creek (Figure 3). Composite samples

SS-1 through SS-4 were collected from the north side of Seeley Creek, and samples SS-5 and SS-6 from the south side. The sample results showed concentrations lower than those from test pit samples.

Sampling results from all locations showed no volatile organic target compounds. Low levels (0.008 mg/kg to 0.17 mg/kg of Tentative Identified Compounds (TICs) were detected in most of the surface soil samples.

Semivolatile organic chemicals were detected at levels on the order of 1 to 3 mg/kg of target compounds in SS-1, SS-2 and SS-5. Tentatively Identified Compounds ranged from 11.6 mg/kg (SS-5) to 1.173 mg/kg (SS-4). Tentatively Identified Compounds were measured at 14.3 mg/kg and 17/mg/kg in background samples BS1-UnA and BS2-Tg.

No pesticides were detected. PCBs were measured up to 13.7 mg/kg at (SS-4).

Approximately half of the inorganic chemical sample results for the onsite surface soils are below the maximum background levels.

In Sampling Rounds 4 and 5, the presence of PCBs in SS4 and SS6, and lead in SS6 was further evaluated. A sampling grid similar to the test pit sampling grid was placed in these areas; and the composite surface soil subsample locations were individually resampled and tested in these two areas.

A summary of the locations where elevated levels of lead or PCBs were detected in Rounds 2,4 and 5 is provided in Table 1.

GROUND WATER:

Eleven monitoring wells were installed at the site, at the locations shown in Figure 3. Six wells, MW-1, MW-2, MW-3, MW-4, MW-5 and MW-11, are located hydraulically up-gradient of the site, on the west side. Four of the remaining wells are located on the down-gradient, east side of the site. One well, MW-10, is located between the two disposal areas adjacent to the north and south sides of Seeley Creek.

Based on the results of two rounds of sampling from the monitoring wells, volatile organic chemicals were shown to be absent in the ground water. Ground water samples were also taken from test pits and tested for volatile organics. The only detection was benzene at an estimated concentration of 0.5 ug/l in ground water collected from Test Pit 5. However, since benzene was not present in the waste/soil samples from this test pit, it is possible that this detect was a false positive.

No semivolatile organic chemicals were confirmed to be present in the monitoring well samples.

Sampling results from all wells showed no pesticide or PCB contamination.

In all cases, ground water sampled from down-gradient wells and test pits at the site, showed no significant difference from up-gradient results, and did not exceed NYSDEC Part 703.5 water quality standards for Class GA ground water for organic chemical contamination of drinking water supplies.

Samples tested for dissolved metals from down-gradient wells at the site showed no concentrations which exceeded the Class GA standards. However, in the Rounds 1 and 2 sampling, several of the total metals analytes exceeded the Class GA groundwater standards both up-gradient and down-gradient of the site. The reason for the total metals exceedances in Rounds 1 and 2 was attributed to suspended particulates entrained during purging of the monitoring wells immediately prior to sampling. This was confirmed by analyses for total metals conducted in Round 4,5 and 6 where a lower purge rate yielded total metals data that were much lower than the Rounds 1 and 2 data. In these later rounds, Class GA standards were exceeded only for total iron and manganese in some upgradient and down gradient monitoring wells.

The results of all sampling rounds performed for metals analyses showed no significant difference in samples from up gradient and down gradient wells, indicating no impact by the site on the ground water medium. The private wells located in the vicinity of the site are only used for industrial/commercial purposes. Drinking water for the entire area surrounding the site is being supplied by the Elmira Water Board.

SURFACE WATER:

Surface water samples were taken at SW-1, hydraulically up gradient of the site in Seeley Creek, and down gradient at SW-2. SW-3 was taken down stream of the storm water outfall on the east side of the traffic circle near the northeast corner of the prison(Figure 3).

No volatiles or semivolatile organic chemicals, pesticides or PCBs were detected in the surface water. Concentrations of inorganic chemicals in the down gradient surface water samples SW-2 and SW-3 were compared to up gradient samples SW-1 and showed no significant difference.

SEDIMENT:

Stream sediment samples were collected from the same locations as the surface water samples as well as three additional up stream locations.

No volatile organic chemicals, pesticides or PCBs were detected in the samples. Semi volatile target compound concentrations and total aggregate levels of Tentatively Identified Compounds in the down gradient samples were measured at levels comparable to those in up gradient sediment samples. Metals analyses of down gradient samples showed no significant difference to up gradient samples analyses.

Section 4: ENFORCEMENT STATUS

The NYSDEC has entered into a Consent Order with Unisys Corporation under Article 27 of the Environmental Conservation Law (ECL) entitled "Inactive Hazardous Waste Disposal Sites." The Consent Order was signed by the Commissioner of NYSDEC on December 11, 1988. The purpose of this Consent Order was to provide for the implementation of an RI/FS at the Farm site and the selection of a final remedial alternative.

Section 5: GOALS FOR THE REMEDIAL ACTION

The remedial alternative proposed for the site by the Department was developed in accordance with the New York State Environmental Conservation Law (ECL) and is consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 43 USC Section 9601, etc., seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). The criteria used in evaluating the potential remedial alternatives can be summarized as follows:

1. Compliance with Applicable or Relevant and Appropriate New York State Standards, Criteria and Guidelines (SCGs) -- SCGs are divided into the categories of chemical-specific standards which help define safe exposure levels for contaminants, action-specific-technical or performance of standards associated with certain actions, and location-specific-restrictions on activities at certain locations. A listing of ARARs is presented in Table 7.
2. Protection of Human Health and the Environment -- This criterion is an overall and final evaluation of the health and environmental impacts to assess whether each alternative is protective. This is based upon a composite of factors assessed under other criteria, especially short/long-term effectiveness and compliance with ARARs.

3. Short-term Impacts and Effectiveness -- The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment is evaluated. The length of time needed to achieve the remedial objectives is estimated and compared with other alternatives.
4. Long-term Effectiveness and Permanence -- If wastes or residuals will remain at the site after the selected remedy has been implemented, the following items are evaluated: (1) the magnitude and nature of the risk presented by the remaining wastes; (2) the adequacy of the controls intended to limit the risk to protective levels; and (3) the reliability of these controls.
5. Reduction of Toxicity, Mobility, and Volume -- Department policy is to give preference to alternatives that permanently and significantly reduce the toxicity, mobility, and volume of the wastes at the site. This includes assessing the fate of the residues generated from treating the wastes at the site.
6. Implementability -- The technical and administrative feasibility of implementing the alternative is evaluated. Technically, this includes the difficulties associated with the construction and operation of the alternative, the reliability of the technology, and the ability to effectively monitor the effectiveness of the remedy. Administratively, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining special permits, rights-of-way for construction, etc.
7. Cost -- Capital and operation and maintenance costs are estimated for the alternatives and compared on a present worth basis. Although cost is the last criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, lower costs can be used as the basis for final selection.

The overall objectives of the remedial action to be undertaken for the site will be to:

- Reduce the potential for direct exposure to waste/soils and surface soils presenting localized high potential risks.
- Reduce the toxicity, mobility or volume of waste constituents and soil contaminants.

- Preserve or enhance the unique natural, environmental, ecological and recreational resource characteristics of the site.

The following risk-based site specific clean-up goals have been established for individual contaminants present in the surface and sub-surface soils at the Farm Site:

<u>Contaminant in Soil</u>	<u>Clean-up Goal</u>
Cadmium	10 parts per million(ppm)*
Lead	350 ppm
Nickel	500 ppm up to 3 ft. depth 1,000 ppm below 3 ft. depth
PCB	1 ppm (Surface) 10 ppm (Subsurface)

* ppm here means pounds of contaminant per million pounds of soil

Table 1 gives elevated concentrations detected in the soils at the RRMDSR(northern half-of the Farm site). Approximately a total of 12 acres of land (both sites of Seeley Creek) will be affected by the Remedial Action.

Section 6: SUMMARY OF THE EVALUATION OF THE ALTERNATIVES

Chemung (Southport) Correctional Facility Site (SCF):

For the SCF site(southern half of the Farm), **No remedial action** is planned based on 1987-88 Removal Action and the fact that no other environmental problem was identified during the RI(Figure 4).

Remington Rand Mach. Div. of Sperry Rand Site(RRMDSR):

The remedial alternatives developed for the RRMDSR site(northern half of the Farm site) are evaluated and compared in detail. Based on this evaluation and comparison, a remedial action is proposed, further defined and evaluated against NYSDEC and USEPA guidance criteria. The remedial alternatives evaluated in the second screening (Table 3) comprise the No Action alternative, three alternatives which limit exposure to the waste/soil and two treatment alternatives. A summary matrix showing how the

technologies are combined to form the six remedial alternatives discussed in this section is provided in Table 2.

In the detailed analyses, each of the alternatives is compared and numerically evaluated against the seven previously mentioned goals of remedial action. •

A summary of the numerical analysis against the seven weighted criteria is provided in Table 4.

ALTERNATIVE 1

- No action

Under Alternative 1, the waste/soil would remain in place and direct contact would be possible. Under the ingestion scenario the carcinogenic risk, based upon the geometric mean of individual risks, would be 9.06×10^7 and the average noncarcinogenic risk would be 0.33, which signify no overall significant potential health threat to the community. At isolated locations where elevated concentrations of chemicals constituents occur, however, risks to public health and the environment may be higher. (Total Score = 60).

ALTERNATIVE 2

- Site access restrictions
- Groundwater monitoring

Under Alternative 2, 6 ft chain link fencing would be used in controlling access to the site and would limit direct contact with the waste/soils by the public; deed restrictions would govern future site use.

Groundwater monitoring would be effective and reliable in providing data on the potential future migration even though currently there is no evidence that this may occur.

Based upon the historical use of the site for recreation, it is likely that the local population would oppose this and any other alternative involving access restrictions by fencing. If implemented, it is likely that attempts would be made to penetrate the fence, and it is probable that maintenance requirements would be ongoing and substantial. (Total Score = 59).

ALTERNATIVE 3

- Site access restrictions
- Ground water monitoring

- Cap disposal areas
- Flood protection dike

Under Alternative 3, the waste/soil would be isolated without treatment. A low permeability (relative ease of fluid flow under unequal pressure) clay cover would inhibit infiltration and preclude direct contact. A cover of this type has proven to be a reliable and effective isolation technique when environmentally compatible with a site. The areas of potential remediation lie within the 100-year flood plain of the Seeley Creek. Thus, the long-term effectiveness of the cover is uncertain without flood protection because it is possible that the scouring effects of flood waters may uncover the waste/soils that were isolated.

This alternative has a disadvantage that together with precluding access to the site, the natural habitat of terrestrial species would be impacted. This alternative may not prove to be an effective long term remediation option and long term monitoring of the site would be required. (Total Score = 69).

ALTERNATIVE 4

- Site access restrictions
- Ground water monitoring
- Flood protection dike
- Excavation
- Dispose in on onsite RCRA vault/landfill

Under Alternative 4, waste/soil showing elevated concentrations of compounds will be excavated and disposed in a RCRA vault or landfill to be constructed at the site. This alternative would result in additional impact to the natural habitat by virtue of the increased extent of earth moving associated with construction of the RCRA facility. Long term monitoring would be required to confirm that the facility is not affecting the environmental media. (Total Score = 63).

ALTERNATIVE 5

- Site access restrictions
- Ground water monitoring
- Excavation
- Onsite solidification

Under Alternative 5, the waste/soils would be treated by addition of chemicals to create a solid in which the contaminated waste/soils would be stabilized. This technology, though commercially implemented for inorganic chemicals, is currently not widely proven for Arochlors and organic chemicals in general. These treatment

technologies are often not economically practical for small scale operations such as that required by the McInerney Farm site. (Total Score = 78).

ALTERNATIVE 6

- Site access restrictions
- Excavation
- Offsite TSD facility

Under Alternative 6, the waste/soils with hazardous waste characteristics would be excavated and transported offsite for treatment at a TSD facility. It is probable that the waste/soils ~~would be combusted~~ in a permitted incineration facility or treated prior to disposal in a permitted secure landfill; the method of treatment/disposal will be in accordance with applicable regulations. Non-hazardous industrial waste excavated will be transported to an appropriate offsite facility for disposal. Under this alternative, the contaminated waste/soils contributing significantly to human health risks would be removed and thus, residual health risks present at the site would be minimized. (Total Score = 84).

Section 7: SUMMARY OF THE GOVERNMENT'S DECISION

For the **SCF site (southern half of the Farm site)**, drum/soil removal action was completed in 1987-88. Also, no environmental problems were identified during the RI. No further remedial action is, therefore, planned.

The summary of Government's decision for the **RRMDSR site (northern half of the Farm)** is as follows:

(A) Description of Selected Alternative:

Based on the evaluations of the various alternatives for the RRMDSR site, Alternative 6 is the selected alternative. Alternative 6 includes excavation and offsite treatment/disposal, a remedial action that attains SCGs, is protective of public health and the environment in both short and long term, uses treatment technology to permanently decrease the mobility of pollutants, has minimal impact to current natural habitats and recreational use of the land, and is readily implementable and cost effective. Alternative 6 also meets the remedial objectives described in Section 5, most efficiently. This alternative obtained the highest score in the detailed analyses (Table 4) and is selected as the basis for remediation of the site.

Remediation by excavation and offsite treatment in areas where elevated concentrations of chemical constituents were detected will be coupled with environmental enhancement and restoration at these and other parts of the site as described below.

Excavation and Treatment

Waste/soil and surface soil areas where levels which exceed the cleanup goals (Section 5) have been detected (Table 1), will be excavated thereby precluding direct contact and reducing risk to Public health. Excavated hazardous waste will be transported to a TSD facility for treatment and disposal.

Excavation will be accomplished with conventional earth moving equipment such as a front-end loader. Care will be taken in the choice of excavation equipment and methods of working to minimize disturbance of existing plant and wildlife. Precautions will also be taken to comply with National Ambient Air Quality Standards for Particulates. In some cases manual excavation and segregation may be performed. A small berm will be constructed around excavation areas, where appropriate, to minimize surface storm water run on and erosion while excavations are open.

The excavated waste/soil will be tested to determine if it is RCRA/TSCA hazardous waste and if so, will be transported to a TSD facility for treatment and disposal. Non-hazardous industrial waste excavated above the cleanup goals will be transported to an appropriate offsite facility for disposal. Transportation, treatment and disposal will be performed in accordance with the necessary state and federal regulations. Required permits will be obtained.

The Technical decision aspects of the selected alternative will be covered under a separate report following signing of the Record of Decision by the Commissioner of the New York State DEC.

Environmental Enhancement and Restoration

At a number of locations in the disposal areas north and south of Seeley Creek sparse vegetation or uneven relief (mounds, ridges and gullies) and items such as metal containers (drums, cans and tanks) and inert solid waste objects (concrete, wood and asphalt roofing) are visible at the surface. These areas will be improved by:

- °Placement of up to 1 foot of fill in areas of sparse vegetation;
- °Localized filling and regrading to eliminate abrupt changes

in relief and encourage runoff;

- °Collection, removal and offsite disposal of metal containers visible at the surface;

- °Reburial of inert solid waste objects.

Excavations will be backfilled with clean fill imported from outside the disposal areas and adequately compacted. Filled and regraded areas will be seeded with a grass mixture compatible with the site ecology to temporarily stabilize the topsoil; these areas will then be allowed to return naturally to their original vegetative conditions over time.

Site Access Restriction and monitoring

Institutional site access control could take the form of a notice that the site is the subject to an administrative order on consent for the Development and Implementation of Remedial Program for an Inactive Hazardous Waste Disposal site pursuant to Article 27, Title 13 of the Environmental Conservation Law of the State of New York with site number and specific prohibitions to protect the integrity of the site.

Three rounds of post-removal groundwater monitoring would be conducted in a period of five years after the completion of the removal action.

Cleanup Goals

The cleanup goals (Section 5) for the Farm Site takes into account long term health affects and potential exposure.

During removal, soil samples will be collected and analyzed for the specific chemical constituents of concern at each location. If the concentrations exceed the cleanup goals, additional soil will be excavated and the adjacent waste soil material remaining will be resampled. This action will be repeated until the area is remediated to the satisfaction of NYSDEC and NYSDOH. Confirmatory samples will then be collected and analyzed in the laboratory for PCBs, cadmium, nickel and lead. These samples will be obtained from the soil remaining in place at a frequency of one sample per 1,000 square feet of exposed excavation. The area will be considered remediated when concentrations remaining in place are less than the applicable cleanup goals.

(B) Evaluation of Selected Alternative:

Compliance with SCGs

The operation will be conducted in accordance with SCGs.

Overall Protectiveness of Human Health and the Environment

With removal of waste/soil having elevated levels of chemical constituents, locally high carcinogenic risks and noncarcinogenic risks will be reduced to levels that do not pose a significant threat to the community.

Short-term Effectiveness

Careful site management, utilizing a site-specific health and safety plan to provide access, dust and other controls should result in no short-term increased risks to the community during implementation. The limited duration of the project will also result in minimizing short-term risk.

Long-term Effectiveness

The alternative will be protective on a long-term basis, and the risk of exposure will be reduced. Removal of the wastes will result in a permanent solution that will enable the site to continue to be used for recreational purposes with no significant impact to long-term human use or natural habitat.

Reduction of Toxicity Mobility or Volume

At the TSD facility, the hazardous waste removed from the McInerney Farm site will be stabilized, resulting in a reduction in mobility. Volume and toxicity would not be significantly reduced.

Implementability

The operation will be completed in one construction season using conventional earth moving equipment. No unusual procedures or technical difficulties are anticipated, since all technologies to be employed are commercially demonstrated.

(C) Potential Volumes

Based on the available sampling and analysis data collected in Rounds 1 through 6, the volume of waste/soil and surface soil which may require excavation and treatment has been estimated and is summarized in Table 5. It is estimated that approximately 5,360 cubic yards of waste/soil or surface soil will be excavated. This volume estimate includes extrapolations where the full areal extent has not been completely established.

(D) Preliminary Project Costs

The cost of the remedial program is estimated at approximately \$4.9 million based on the data currently available and assuming the excavated material will all be hazardous under RCRA and require treatment (Table 6). Prior to selection of the receiving facility the waste/soil will be tested to determine the appropriate method of disposal or treatment in accordance with applicable regulations.

The cost of limited post-removal groundwater monitoring (three rounds over five years) for specific inorganic contaminants of concern will be approximately \$ 15,000.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

RESPONSIVENESS SUMMARY

for the

McInerney Farm Site
(Remington Rand-Chemung Correctional Facility Site)

Site No. 808005 and 808020

Town of Southport
Chemung County, New York

INTRODUCTION

This report summarizes the public comments on the former McInerney Farm (Remington Rand-Chemung/Southport Correctional Facility) site expressed at the public meeting held February 19, 1992, at the Fire Hall in Southport, Chemung County, and the State's responses

The New York State Department of Environmental Conservation (NYSDEC) listed the northern half of this site (Remington Rand) as an inactive hazardous waste disposal site in 1983. The southern half (Chemung/Southport Correctional Facility), was listed in 1987. Removal of drums and associated PCB contaminated soils from the Chemung/Southport Correctional Facility site was conducted by the New York State Office of General Services (NYSOGS) in 1987-88 during the construction of the prison. The Potentially Responsible Party (PRP) - Unisys Corporation has completed a Remedial Investigation/Feasibility Study (RI/FS) at the McInerney Farm site under a NYSDEC Consent Order (legal agreement).

The objectives of the RI/FS were to:

- Assess the nature, areal extent and effects of the hazardous materials in the project area;
- Identify and evaluate remedial alternatives selected to mitigate contamination problems that pose threats to the public health or the environment, as determined by the field work and risk assessment conducted during the RI; and
- Develop and evaluate remedial alternatives to select a preferred remedial alternative.

A comprehensive list of remedial technologies was evaluated to determine potentially feasible technologies. The remedial alternative selected for this site is in compliance with the New York State Standards, Criteria and Guidelines (SCGs), protects human health and environment, both on a short term as well as a long term basis and is implementable and cost effective.

The selected alternative involves:

- Excavation of Contaminated soils
- Off-site treatment and disposal
- Site access restriction and monitoring

At the February 19, 1992 public meeting, the NYSDEC's preferred remedial alternative was formally presented to the

public; and written comments or questions were accepted through March 10, 1992.

The following are the responses to the questions and comments received.

1. Question: Who owns the northern portion of the property. I believe the State owns the southern part.

Answer: According to a recent check in the tax-map of this area, it appears that the entire portion of the site north of Seeley Creek - which forms a major portion of the Remington Rand disposal area - is owned by Chemung Contracting of Pine City, New York. Chemung Contracting also owns a small part of the site south of Seeley Creek. The remaining part of the site south of Seeley Creek is owned by the State of New York.

2. Question: As a young man, I played in that dump a lot and I know that the dump was a lot bigger than the color coded areas shown on your map for removal action. There were also barrels dumped there. How were the exact areas of contamination determined? Using infra-red techniques?

Answer: You are right, the area used as a dump in the past was much larger than the area identified for removal action. The entire disposal area identified using aerial photographs, geophysical studies and a soil vapor survey, - is shown here in Figure 2 (projected on screen). Several test pits (TPs) were then dug (with a backhoe) in the areas identified as possibly containing buried material during the preliminary studies. Waste/soil sampling was conducted during the TP excavation. Six out of twelve TPs were found to be contaminated with PCBs, Lead, Cadmium and Nickel. Expanded grid sampling (grid projected on screen), in accordance with USEPA guidelines, was then conducted around the areas of contaminated TPs. Individual samples were taken at each location in the grid at one-foot interval upto a depth of eight feet. By comparing sampling results with previously set cleanup goals for each contaminant, boundaries of areas for removal action were drawn as shown in the color-coded map projected on the screen. Regarding buried barrels; four barrels were excavated during test pit excavation. Others, if found, will be excavated and removed when the remedial action for the site is underway.

3. Comment: South of Seeley Creek, to my knowledge, was not used as a disposal area. It now appears that they did use it - maybe after I left the area.

Answer: Yes, Remington Rand did use the areas south of Seeley Creek as a disposal area. In fact, the drums/waste were discovered as far south as the prison area. However, it appears from what was found during the site investigation that the use of the southern portion was limited and localized.

4. Question: What type of health threat exists at the site? How serious is the contamination problem?

Answer: Because PCBs and lead-the main contaminants-are largely restricted to the subsurface, and because they adhere to soil particles and tend not to move through the environment, there should not be a significant off-site health threat. This was supported by the results of the site investigation, which showed that the groundwater and surface water(Seeley Creek) are not impacted by this disposal area. However, because of the elevated levels and larger extent of contamination of the on-site sub-surface soils, actual or threatened release of hazardous substances from this site, if not addressed by implementing the Proposed Remedial Action Plan(PRAP), presents a current or potential threat to public health or the environment.

The surface soil areas with localized contamination, will be fenced off by a temporary fence, soon, to prevent direct access to the public.

5. Question: Why is deed restriction necessary? What will be the nature of the deed restrictions?

Answer: The Alternative 6, NYSDEC's preferred remedial alternative, includes the site access restriction. This is necessary because - although the objective of the remedial action, as proposed, is designed to protect human health and the environment - it would not recreate pre-release conditions at the site. A deed restriction will prohibit certain types of activities. Such restrictions could take

the form of a notice that the site was subjected to an Administrative Order on Consent and site remedial program pursuant to Article 27, Title 13 of the Environmental Conservation Law of the State of New York. Any new use of the site (such as any construction, installation or use of any buildings, wells, pipes, ditches, roads or any structures that may affect the integrity of the site) must, therefore, receive the approval of the Department of Environmental Conservation.

6. Question: In Table 4 - Detailed Analysis of Alternative Summary - What is the highest attainable score for each evaluation criteria? It appears that each criteria has its own attainable score and its own relative weighting.

Answer: Yes, each evaluation criteria has its own attainable score assigned for selection of a remedial alternative(table 4 projected on screen). The attainable scores are as follows:

•Compliance with New York SCGs	10
•Protection of human health and the environment	20
•Short-term effectiveness	10
•Long-term effectiveness and permanence	15
•Reduction of toxicity, mobility and volume	15
•Implementability	15
•Cost	15
TOTAL	100

7. Question: Who will fund the remedial action? What is the total cost of this project? When will this removal be done?

Answer: The recently completed Remedial Investigation/ Feasibility Study(RI/FS) was funded by Unisys Corporation. The next phase of this remedial program, Remedial Design/Remedial Action(RD/RA), is also expected to be funded by Unisys. The preliminary project cost, as worked out in the Feasibility Study report, is approximately \$5 million, (assuming that all the excavated material hazardous waste). The actual project cost may be reduced if some of the waste turns out to be non-hazardous.

The RD/RA phase will be initiated in spring of this year. It is expected that the Remedial Action will take place in summer of 1993.

8. Question: Has this investigation prompted the on-going investigation at the nearby Sperry Remington Plant site? Check Cole Brook Creek at the outfall of this plant.

Answer: The NYSDEC is unaware of any such investigation currently underway at the Sperry Remington plant site. Unisys in the past did indicate in one of their letters that they would be investigating the plant site. We will follow this up with Unisys. During any plant site investigation, NYSDEC will make sure that the Cole Brook Creek is sampled at appropriate locations.

9. Comment: I know of some businesses near the site using well water for commercial purposes - not for drinking, these wells are polluted/contaminated (approx. well locations indicated on map). Also, there are wells on the prison property.

Answer: The locations of these wells are clearly upgradient to this site. The contamination in these wells, moreover, may be bacteriological. According to our information, the wells in the prison area are not being used since the discovery of drums in that area in 1987. Drinking water for the entire area surrounding the site, including the prison, is being supplied through the Elmira public water supply system.

10. Question: There was a disposal site west of the McInerney site. Also there is a pond excavated on the west by a contractor. Has this pond been tested?

Answer: Yes, in past, there was a Construction & Demolition debris disposal site, known as the South Mountain Demolition area, west of the McInerney site. The pond west of the site was upgradient to the site and was not tested. However, a pond downgradient and immediately east of the site (shown on the map projected on screen) was tested and was found not to have been contaminated.

11. Question: Does these contaminants get airborne? We live nearby. Are we likely to have been exposed to these contaminants? There has been increased cases of cancer in area residents. Have you done, or do you have plans to conduct medical monitoring/health study for the area residents? If not, why not spend about \$ 50,000 more when \$5 million will be spent for this cleanup.

Answer: Yes, the PCBs and Lead, which are the main contaminants, can get airborne through the dust particles (these contaminants normally get attached to dust particles). The most likely time during which these contaminants may get airborne in any significant amount is during excavation and removal of contaminated waste/soil. Because of this, continuous particulate air monitoring for the ambient air will be conducted when these activities are undertaken to cleanup the site. Work will be stopped if the amount of dust particles in the air exceeds a pre-determined value.

Regarding past exposure: This is the first instance that the State Department of Health has been made aware that there are concerns related to the number of cancer cases in the area near this site. Contamination at the site is found primarily in the subsurface soil and human exposure to these contaminants is unlikely. There is no documented evidence of past human exposure to site-related contaminants and, based upon the data generated in the remedial investigation, the potential for human exposure to these contaminants is minimal. However, the State Health Department will follow-up on these health-related concerns.

12. Question: Are people riding (bike, horse) in the area of contamination at risk? Is the contaminated area fenced?

Answer: Only one small surface soil area north of Seeley Creek and one small surface soil area south of the creek have been identified as contaminated areas. Seasonal recreational use of this site, does not constitute significant exposure which may result in an elevated health risk. Given the levels of contamination found in these areas, only a continuous long-term exposure may be considered a health risk.

In any case, a temporary fence will soon be installed around the two areas to control direct public access. The fence will remain in-place until the removal action begins.

13. Question: Is it possible to get a copy of the results of this investigation, including those of monitoring wells?

Answer: Yes, the reports of this Remedial Investigation/Feasibility Study are available for your review at the Southside Branch of Steele Memorial Library, 378 South Main Street, Elmira. These documents are also available at the NYSDEC Region 8 office at 6274 E. Avon-Lima Road, Avon, NY. The reports include results of monitoring well sampling.

E N D

TABLES

TABLE 1

ELEVATED CONCENTRATIONS DETECTED

MCINERNEY FARM SITE (RRMDSR)
FEASIBILITY STUDY

Area	Round	Sample Description	Sample Location	Sample Depth (ft)	Analyte Concentration (mg/kg)			
					Cadmium	Lead	Nickel	PCB
TP6	1	Tar, Slag, Crystals	Drum A, B, C, D †	0-1, 1-2, 2-3, 3-4	15.9	567	550	
TP8	1	Slag	3, 3A, 4	2-3, 3-4		383	14,100	
TP9	1	Sludge	2A, 2B, 2C	1-2	15	2,050		
	4	W/S	28 (C)	2-3				153
	4	W/S	33 (B)	1-2		6,257.8		
TP10	1	Ash, Crystals	1, 2	0-1, 1-2		491		7.95
	4	W/S	(A)	0-1				140
TP10A	1	Slag	1, 2	0-1, 1-2	11,700			8.99
	4	W/S	29 (C)	2-3	63.3			
	4	W/S	7 (B)	1-2				>2,000
	5	W/S	5,1 (G-H)	6-8		1,150.0		
TP11	1	Sludge	1,2	3-5		1,030.0		
TP12	1	Ash	1, 2, 3	0-1, 1-2, 2-3			7,580	5,820
	4	W/S	5(A), 9(A), 11(A),	0-1, 0-1, 0-1,				>2,000
	5	W/S	6,3 (A-B)	0-2	15.1			
SS4	2	SS	Composite	0-0.5		505	606	13.7
	4	SS	34	0-0.5				6.8
	5	SS	SUB 1	0-0.5			2,020	
	5	SS	SUB 3	0-0.5				23
SS6	2	SS	Composite	0-0.5			555	13
	4	SS	98	0-0.5		3,934		
	4	SS	21	0-0.5				27

NOTE:

† - Drum removed from test pit

W/S - Waste/Soil

SS - Surface Soil

TP - Test Pit

Mg/Kg - Milligrams/Kilograms = ppm

TABLE 2

McInerney Farm Site(RRMDSR)
Southport, Chemung county

-----REMEDIAL ALTERNATIVES-----

Remedial Technology	<u>NO ACTION</u>	<u>CONTAINMENT</u>			<u>TREATMENT</u>	
	1	2	3	4	5	6
*No Action	X					
*Site Access Restrictions		X	X	X	X	X
*Ground Water Monitoring		X	X	X	X	
*Cap Waste Disposal Areas			X			
*Flood Protection Dike			X	X		
*Excavation				X	X	X
*Onsite RCRA vault/landfill				X		
*Onsite Immobilization					X	
*Offsite TSD Facility						X

TECHNOLOGY	PROCESS OPTION	EFFECTIVENESS	IMPLEMENTABILITY	COST
No Action	Not Applicable	<ul style="list-style-type: none"> Provides baseline level for effort comparison 	<ul style="list-style-type: none"> May not be acceptable to local/state/federal authorities 	<ul style="list-style-type: none"> None
	Fencing	<ul style="list-style-type: none"> Limits direct exposure - breaks direct exposure pathway Effectiveness depends on future implementation and enforcement 	<ul style="list-style-type: none"> Easily implemented Legal requirements and authority 	<ul style="list-style-type: none"> Negligible Negligible
Capping	Soil	<ul style="list-style-type: none"> Effective, may be subject to cracking 	<ul style="list-style-type: none"> Easily implemented, will require enforcement of land use restrictions 	<ul style="list-style-type: none"> Moderate capital, moderate O&M
	Synthetic Membrane	<ul style="list-style-type: none"> Effective, may be subject to puncture and tears 		
	Multi Layer	<ul style="list-style-type: none"> Effective, least susceptible to cracking 		
Surface Controls	Dust Control	<ul style="list-style-type: none"> Effective, may be required during construction activities 	<ul style="list-style-type: none"> Easily implemented, minimal equipment 	<ul style="list-style-type: none"> Negligible
	Grading	<ul style="list-style-type: none"> Effective in controlling soil erosion and contaminant migration - usually used with capping techniques Effective in protecting against flooding 	<ul style="list-style-type: none"> Normal construction activities, may require on-site soil Readily implemented using standard construction techniques 	<ul style="list-style-type: none"> Moderate capital, low O&M Moderate capital, low O&M
Physical	Immobilization	<ul style="list-style-type: none"> Effective, not fully proven on organics 	<ul style="list-style-type: none"> Difficult to implement 	<ul style="list-style-type: none"> High capital
	Encapsulation	<ul style="list-style-type: none"> Effective, not fully proven on organics 	<ul style="list-style-type: none"> Difficult to implement 	<ul style="list-style-type: none"> High capital
	Crushing & Grinding	<ul style="list-style-type: none"> Does not remove contaminants 	<ul style="list-style-type: none"> Easily implemented 	<ul style="list-style-type: none"> Low capital, low O&M
	Repackaging	<ul style="list-style-type: none"> Effective only in combination with a sound disposal technology 	<ul style="list-style-type: none"> Easily implemented 	<ul style="list-style-type: none"> Low to moderate capital
Containment	Complete Removal	<ul style="list-style-type: none"> Effective for managing wastes 	<ul style="list-style-type: none"> Requires coordination with other disposal techniques 	<ul style="list-style-type: none"> Moderate capital, no O&M
	Partial Removal	<ul style="list-style-type: none"> Effective for hot spots 	<ul style="list-style-type: none"> Easily implemented 	<ul style="list-style-type: none"> Moderate capital, no O&M
	Onsite Vault	<ul style="list-style-type: none"> Effective for containing and managing wastes 	<ul style="list-style-type: none"> Permitting requirements applicable to RCRA facilities 	<ul style="list-style-type: none"> High capital, high O&M
	Onsite RCRA Landfill	<ul style="list-style-type: none"> Effective for containing and managing wastes 	<ul style="list-style-type: none"> Permitting requirements applicable to RCRA facilities 	<ul style="list-style-type: none"> High capital, high O&M
	Offsite Facility	<ul style="list-style-type: none"> Effective for on-site disposal and treatment of wastes 	<ul style="list-style-type: none"> Requires locating suitable facility 	<ul style="list-style-type: none"> High capital, no O&M cost

MCINERNEY FARM SITE (RRMDSR)
FEASIBILITY STUDY

TABLE 3
EVALUATION OF PROCESS OPTIONS (2ND SCREENING)

TABLE 4
DETAILED ANALYSIS OF ALTERNATIVES SUMMARY
MCINERNEY FARM SITE (RRMDSR)
FEASIBILITY STUDY

	Compliance With New York SCGs	Protection of Human Health and Environment	Short-Term Effectiveness	Long-Term Effectiveness and Performance	Reduction of Toxicity, Mobility and Volume	Impenetrability	Cost	Total Score
Alternative 1: No action	10	9	10	3	2	11	15	60
Alternative 2: Site access restrictions Ground water monitoring	10	9	10	2	2	11	15	59
Alternative 3: Site access restrictions Ground water monitoring Cap disposal areas Flood protection dike	10	20	5	5	2	12	15	69
Alternative 4: Site access restrictions Ground water monitoring Flood protection dike Excavation Dispose in an onsite RCRA vault/landfill	10	20	8	4	2	9	10	63
Alternative 5: Site access restrictions Ground water monitoring Excavation Onsite solidification	10	20	8	13	9	8	10	78
Alternative 6: Site access restrictions Excavation Offsite TSD facility	10	20	9	13	9	13	10	84

TABLE 5

SUMMARY OF REMEDIAL VOLUME ESTIMATES

MCINERNEY FARM SITE (RRMDSR)
FEASIBILITY STUDY

LOCATION	MEDIUM	ANALYTE	ESTIMATED VOLUME† (cy)
TP6	WASTE	Cd, Pb, PCB	50
TP8	WASTE/SOIL	Ni, Pb	25
TP9	WASTE/SOIL	PCB, Pb, Cd, Ni	2,220
TP10, TP10A & TP12	WASTE/SOIL	Cd, Ni, Pb, PCB	2,710
TP11	SLUDGE	Pb	25
SS4	SOIL	Ni, PCB	67
SS6	SOIL	Ni, Pb, PCB	267
TOTAL VOLUME			5,360

Estimates are based upon results from Sampling & Analysis
Round 1 through 6.

† Volume estimates are based upon extrapolations
where the areal extent is not completely established

TABLE 6
IMPLEMENTATION COST ESTIMATE

MCINERNEY FARM SITE (RRMDSR)
FEASIBILITY STUDY

DESCRIPTION	UNIT	RATE	QUANTITY	COST
1 EXCAVATION & TREATMENT				
• Excavate and backfill contaminated waste/soil*				
Mobilization/Demobilization	LS	\$2,000		\$2,000
Excavate (SS4, SS6, TP6, TP8, TP9, TP10A- & TP12, TP11)	cy	\$25	5,360	\$134,000
Backfill excavated pits	cy	\$10	5,360	\$53,600
• Treatment in Offsite Facility†				
Waste/soil containing PCB††				
Transportation	mile/cy	\$0.25	250	\$164,000
Treatment	cy	\$550	2,620	\$1,441,000
Waste/soil containing Cd/ Ni/ Pb				
Transportation	mile/cy	\$0.25	250	\$171,000
Treatment	cy	\$400	2,740	\$1,096,000
Runon Water††				
Transportation	mile/gal	\$1.00	250	\$1,250
Treatment	gal	\$1.00	5,000	\$5,000
• Confirmatory Sampling & Analysis				
Sample Collection	day	\$800	8	\$6,400
Analysis & Validation	sample	\$150	70	\$10,500
Expenses	LS	\$2,000		\$2,000
			Subtotal	\$3,086,750
2 ENVIRONMENTAL ENHANCEMENT AND RESTORATION				
• Drum handling, overpacking, testing, transport and disposal/treatment	drum	\$1,000	100	\$100,000
• Regrading				
Equipment (Backhoe & Bobcat)	hour	\$115	320	\$36,800
Labor (2 operators & 1 foreman)	hour	\$140	320	\$44,800
• Clean Soil Cover & Revegetation				
1' layer of soil	sy	\$15	5,445	\$81,675
4' layer of soil	sy	\$60	4,445	\$266,700
Revegetate	sy	\$7	10,879	\$76,153
			Subtotal	\$606,128
			Total (1 & 2)	\$3,693,000
Engineering	5%			\$185,000
Miscellaneous	10%			\$369,000
Contingency	20%			\$739,000
			TOTAL COST ESTIMATE**	\$4,986,000

* Assuming Level C protection

† In accordance with applicable regulations

†† Assumed hazardous for estimation purposes

** Estimate accuracy -30%, +50%

TABLE 7

POTENTIAL ARARS

Feasibility Study

McInerney Farm Site (RRMDSR)

POTENTIAL CHEMICAL-SPECIFIC ARARS		
MEDIUM	REQUIREMENTS	CITATION
Ground Water	<p>Ground water must meet NYS Class GA ground water standards. These standards are the most stringent of:</p> <ul style="list-style-type: none"> - Standards for Class GA Ground water - NYS MCLs for Public Water Supplies - MCLs promulgated under the Safe Drinking Water Act 	<p>6 NYCRR Part 703 6 NYCRR Part 703.5 10 NYCRR Subpart 5-1 40 CFR Part 141 10 NYCRR Part 170</p>
Surface Water	Surface water at the site must meet NYS Ambient Water Quality Standards for Class D water bodies.	6 NYCRR Part 701.14
POTENTIAL LOCATION-SPECIFIC ARARS		
LOCATION	REQUIREMENTS	CITATION
Wetlands	Activities must be conducted to avoid, to the extent possible, long-term and short-term adverse impacts associated with the destruction or modifications of wetlands.	40 CFR Part 6, Subpart A & B

CONTINUED

TABLE 7

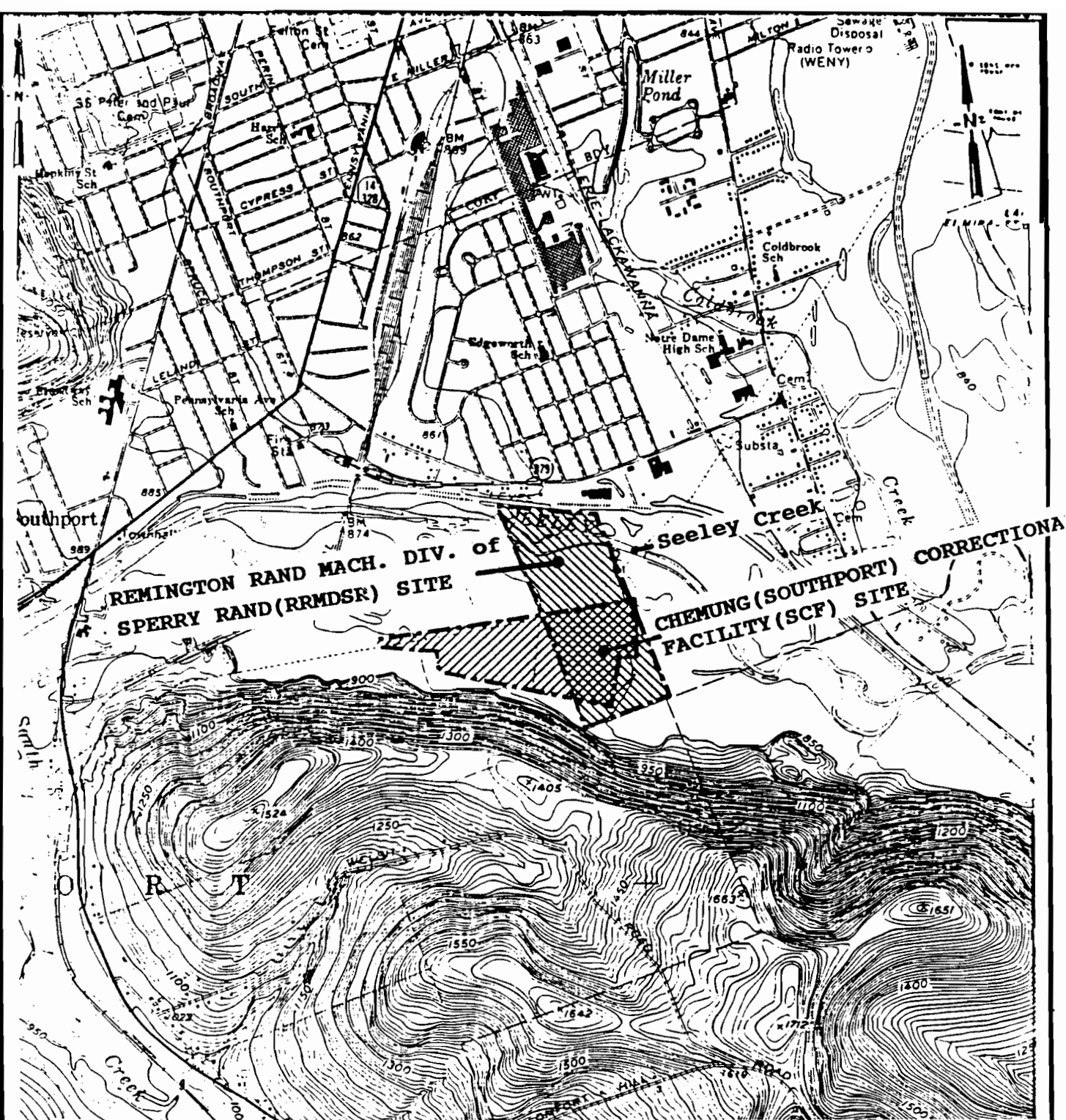
POTENTIAL ARARS

Feasibility Study



McInerney Farm Site (RRMDSR)

POTENTIAL ACTION-SPECIFIC ARARS		
ACTION	REQUIREMENTS	CITATION
Excavation	Site air quality during remedial activities must meet the National Air Quality Standard (AAQS) for particulate matter.	40 CFR Part 50
Handling of Waste Chemicals	Handling of waste during excavation, transportation and treatment/disposal should meet Federal and State Rules and regulations.	40 CFR Part 261 40 CFR Part 268 6 NYCRR Part 373

FIGURES



LEGEND:

-  McInerney Farm Site Boundary
-  Chemung Correctional Facility Construction Site



QUADRANGLE
LOCATION



BASE MAP SOURCE: USGS 7 1/2 minute topographic quadrangle map Elmira, New York-Pennsylvania, 1969.

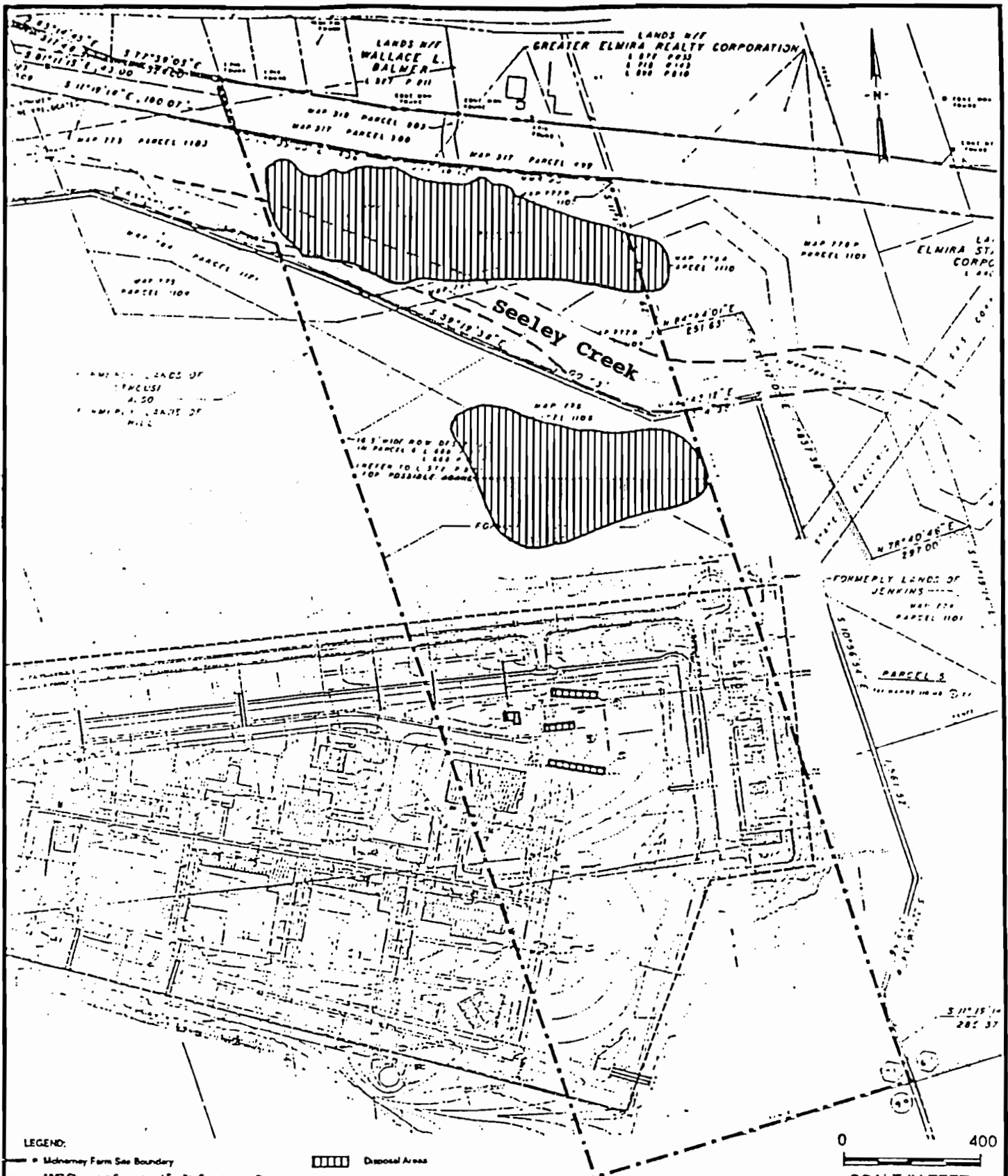
DAMES & MOORE, A Professional Limited Partnership

**MCINERNEY FARM SITE
UNISYS CORPORATION**

FIGURE 1

SITE LOCATION

JOB NO. 15783-004



LEGEND:

- McInerney Farm Site Boundary
- 1987 Chemung Correctional Facility Construction Site
- - - 1949 Corps of Engineers Flood Control Levee
- 1987 Stream Channel

▨▨▨▨ Disposal Areas

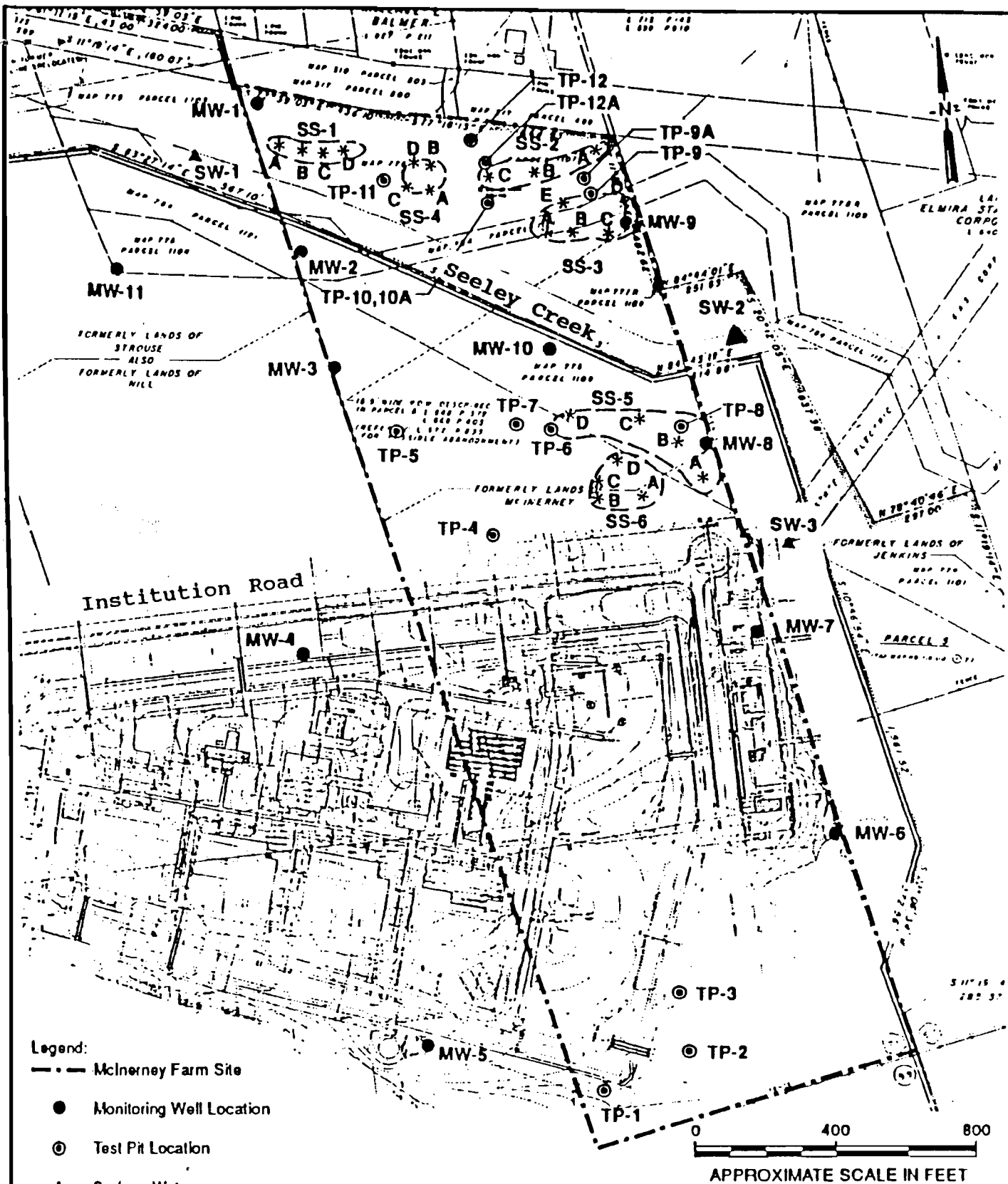
BASE MAP SOURCE: Map of Survey showing land of Henry Valent and that portion to be acquired for the Chemung Correction Facility; Clough, Harbour & Associates; Drawing No. 207E, May 1986.

0 400
SCALE IN FEET

MCINERNEY FARM SITE
UNISYS CORPORATION

FIGURE 2

DISPOSAL AREAS



MCINERNEY FARM SITE
UNISYS CORPORATION

FIGURE 3

SAMPLE LOCATIONS

JOB NO. 15783-015-006

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

J. Hargan



Thomas C. Jorling
Commissioner

MAR 26 1992
A4684

MEMORANDUM

cy f m o t

To: Edward O. Sullivan, Deputy Commissioner, Office of Remediation
From: Michael O'Toole, Jr; Director, Div. of Hazardous waste Remediation
Subject: Remington Rand Mach. Div. of Sperry Rand(RRMDSR) ID #808005
and Chemung(Southport) Correctional Facility(SCF) ID #808020
- Record Of Decision

Date: March 12, 1992

Enclosed is a Record of Decision for the two above named, contiguous registry sites investigated simultaneously by the PRP under the name McInerney Farm(Farm) Site. A 30-day public comment period has been completed and there are no major comments or concerns which change the selected remedy.

The Farm(RRMDSR & SCF) is a 70-acre parcel of land used for disposal of predominantly industrial waste.

During 1987-88, drum/soil removal was conducted by the New York State Office of General Services(NYSOGS) when constructing a part of the prison in the southern half(Registry site SCF) of the Farm site. Subsequent RI, however, did not reveal any further buried waste or any other environmental problems at the SCF. No further remedial action is, therefore, planned in the Remedial Action Plan(RAP) for the SCF site.

The RI revealed extensive soil contamination with hazardous waste in the northern half of the Farm Site(Registry site RRMDSR). No impact on groundwater/surface water at Farm site was revealed during the RI. The PRP(Unisys Corporation) has proposed excavation and off-site treatment and disposal for the contaminated waste/soil, environmental enhancement and site restoration, and site access restriction with limited post-removal groundwater monitoring for the RRMDSR site. The PRP appear to be willing to fund the proposed remedial action.

Of minor public concern was a request to conduct medical monitoring/health studies for the area residents and questions about the need for site access control through deed restriction. Regarding medical monitoring, our response(by NYSDOH) was that there is no documented evidence of past exposures to site related contaminants and the RI indicates minimal exposure, primarily because the contaminants are in the subsurface soils. The NYSDOH indicated that they will follow up on the health related concerns raised, however, currently there are no plans for any type of medical monitoring. Our response on

requiring deed restriction was that the site was used as an industrial dump, and, although, the selected remedial action would be protective of human health and the environment, it was not feasible to achieve pre-release conditions at the site. Specific restrictions protective of integrity of the site will therefore be imposed through deed restrictions. The current seasonal use of the site for recreational purposes, however, will not be restricted.

We recommend concurrence with the ROD.

Attachment

cc: C. Goddard
E. Belmore
M. Mehta, project Manager
M. Khalil