

SOILS MANAGEMENT PLAN
VCA SITE V00223-6

**575 East Mill Street
City of Little Falls
Herkimer County, New York**

October 2003

Prepared for:

**The New York State Department of
Environmental Conservation
Region 6 Headquarters
Division of Environmental Remediation
317 Washington Street
Watertown, New York**

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1.0 OVERVIEW AND OBJECTIVES

The site is approximately 6.5 acres of industrial land located at 575 E. Mill St. in the city of Little Falls, NY. The property is owned by SPX Corporation and is occupied by Feldmeier Equipment, Inc. (FEI). The location of the property is shown on Figure 1. The site has been characterized during previous investigations conducted by SPX and FEI as volunteers under VCA agreement V00223-6. Interim remediation measures (IRM) have been performed as a part of the VCA in the general vicinity of the tannery operations conducted in the late 1800s.

Two specific locations on the site were remediated as IRM activities. The remediation measures were accepted by NYSDEC under the VCA, but both areas have residual contamination above TAGM 4046 guidelines. This Soil Management Plan (SMP) has been prepared to ensure that these locations are properly managed in the future to preclude public exposure to the residual contaminants.

This SMP has been reviewed and approved by the New York State Department of Environmental Conservation (NYSDEC).



2.0 NATURE AND EXTENT OF CONTAMINATION

Based on data obtained from previous investigations and the interim remediation measures completed at two locations on-site, a Final Engineering Report was developed and submitted to the NYSDEC by Buck Engineering, LLC in September 2003.

The two affected remediation areas for which this Plan pertains are shown on Figure 2 and are labeled as "Asphalt-paved area over Chromium-contaminated soils – former tannery site" and "Excavation area – former tannery site". The areas are described below:

- Asphalt-paved cap over Chromium-contaminated soils: Located in the northeast portion of the site generally bounded by East Mill Street on the north, employee parking area on the east, the 7-story vacant building on the south, and the manufacturing building on the west, encompassing approximately 3,000 SF.
- Excavation area: Located in the southeast portion of the site generally bounded by the 7-story building on the north, the City sewer easement on the east and south, and the manufacturing building and paint storage room on the west, encompassing approximately 1,200 SF.

The nature and extent of contamination as well as remediation activities completed during the IRM are described as follows:

- Asphalt-paved cap over Chromium-contaminated soils: Three test pits conducted in the former tannery area yielded soil samples that were obtained from a depth of 4.5-5.5 feet and were analyzed for total chromium levels. The samples had chromium levels ranging from 11.8 – 521 ug/g. Later, soil samples were obtained for hexavalent chromium analysis and one sample was found to have 37.8 ug/g hexavalent chromium. Water sampling was attempted at MW-5 but no viable overburden ground water was found in this area. Surface water samples were also obtained from two locations in the tunnel stream beneath the site and analyzed for total chromium levels. Chromium was not detected in excess of regulatory limits in either sample. It was concluded that chromium contamination was present in soils in the area immediately north of the 7-story tannery structure, but that there were no measurable chromium impacts on surface waters.

The IRM consisted of construction of a 3,000 SF asphalt pavement cap over soils in the impacted area. The asphalt pavement cap was a minimum of 3 inches thick and was placed over graded soils.

Chromium (some present in hexavalent form) is likely present in the soils as a result of the former tannery operations. It is possible that the contaminated soils could be inhaled, ingested or contact skin should a breach of the asphalt cap occur. Hexavalent chromium is a carcinogen and long-term exposure to this contaminant should be avoided.



Nature and Extent of Contamination (Con't)

- Excavation area: During excavation of a test pit in the investigation phase, a small quantity of black tar-like material was observed at the bedrock/soil interface immediately south of the 7-story tannery building. This material had polynuclear aromatic hydrocarbon (PAH) concentrations of approximately 775 ppm, but appeared localized. No remarkable levels of PAHs were found in other test pits east of the FEI buildings. Excavation activities were completed to remove the visibly contaminated soils and these materials were properly disposed of off-site. Excavation depth, which extended to bedrock, did not exceed 4.5 feet below existing grade. Two soil samples were obtained for laboratory analysis from the sidewalls of the excavation at bedrock depth prior to backfilling and re-grading. Results of the laboratory analysis indicated that the samples were free of volatile organic compound (VOC) contamination; however, the semi-volatile (PAH) analyses indicated that total PAHs present in the samples were approximately 250 ppm and 54 ppm, respectively. These PAH concentrations are less than the 500 ppm concentration proposed as an IRM cleanup goal cited by the NYSDEC, although some individual PAHs exceeded TAGM 4046 guidelines. The area was backfilled with native soil, re-graded, and is currently vegetated.

PAHs generally originate from asphalt, tar, fuels, and greases. If future excavation activities were to occur in this area, it is possible that PAHs could be inhaled, ingested, or contact skin. Some of the PAHs in the soils were found at concentrations above carcinogenic limits; therefore, long-term exposure to these soils should be avoided



3.0 CONTEMPLATED USE

As part of the redevelopment project, the property has been identified for continued industrial uses. According to the Voluntary Cleanup Agreement, specific uses for this property are limited to commercial use consistent with local zoning requirements, excepting the following uses: day care/child care facilities, health care facilities and eating establishments.



4.0 MANAGEMENT OF SOILS/FILL AND LONG TERM MAINTENANCE OF COVER SYSTEM

The purpose of this section is to provide environmental guidelines for management of subsurface soils/fill and the long-term maintenance of the cover system during any future intrusive work which breaches the cover system.

This SMP includes the following stipulations:

- Any breach of the cover system, including for the purposes of construction or utilities work, must be replaced or repaired using an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. The repaired area must be covered with clean soil and reseeded or covered with impervious product such as concrete or asphalt, to prevent erosion in the future.
- Control of surface erosion and run-off of the entire property at all times, including during construction activities. This includes proper maintenance of the vegetative cover established on the property.
- Site soil that is excavated and is intended to be removed from the property must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. See Section 4.1 for characterization, handling, and disposal requirements.
- Soil excavated at the site may be reused as backfill material on-site provided it contains no visual or olfactory evidence of contamination, and it is placed beneath a cover system component as described in Section 4.
- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. Off-site borrow sources should be subject to collection of one representative composite sample per source. The sample should be analyzed for TCL PAHs and chromium. The soil will be acceptable for use as cover material provided that all parameters meet the NYSDEC recommended soil cleanup objectives included in TAGM 4046.
- Prior to any construction activities in the two affected areas, workers are to be notified of the site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.
- In the event that any excavation or other breach of the cap over the two affected areas occurs, the property owner shall complete and submit to the Department a report of activities. Such report shall contain a certification that the institutional controls put in place, pursuant to the Voluntary Cleanup Agreement, are still in place, have not been altered and are still effective; that the remedy and protective cover at each location on-site have been restored; and that the conditions at the site are fully protective of public health and the environment.



Management Of Soils/Fill And Long Term Maintenance Of Cover System (Con't)

- The Owner shall complete and submit to NYSDEC an annual report by January 15th of each year. The annual report shall contain certification that the institutional controls put in place, pursuant to the Voluntary Cleanup Agreement Index No. D6-001-99-1, are still in place, have not been altered and are still effective; that the remedy and protective cover have been maintained; and that the conditions at the site are fully protective of public health and environment.

If the cover system has been breached during the year covered by that annual report, the owner of the property shall include the following in that annual report:

- A certification that all work was performed in conformance with this SMP.

In addition, deed restrictions will be implemented in accordance with the requirements of the New York State Voluntary Cleanup Program, limiting the future use of the property to business, commercial, or industrial development.

4.1. Excavated and stockpiled soil/fill disposal

Soil/fill that is excavated as part of development which cannot be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility. For excavated soil/fill with visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and a duplicate sample will be collected for each 100 cubic yards of stockpiled soil/fill. For excavated soil/fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, one composite sample and a duplicate sample will be collected for 2000 cubic yards of stockpiled soil, and a minimum of 1 sample will be collected for volumes less than 2000 cubic yards.

The composite sample will be collected from five locations within each stockpile. PID measurements will be recorded for each of the five individual locations. The composite sample will be analyzed by a NYSDOH ELAP-certified laboratory for Target Compound List (TCL) PAHs, and total chromium.

Soil samples will be composited by placing equal portions of fill/soil from each of the five composite sample locations into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scope or trowel and transferred to pre-cleaned jars provided by the laboratory. Sample jars will then be labeled and a chain-of-custody form will be prepared.

Additional characterization sampling for off-site disposal may be required by the disposal facility. To potentially reduce off-site disposal requirements/costs, the owner or site developer may also choose to characterize each stockpile individually. If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation. If the analytical results indicate that the soil is not a hazardous waste, the material will be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received.



Management Of Soils/Fill And Long Term Maintenance Of Cover System (Con't)

4.2. Sub-grade material

Sub-grade material used to backfill excavations or placed to increase site grades or elevation shall meet the following criteria.

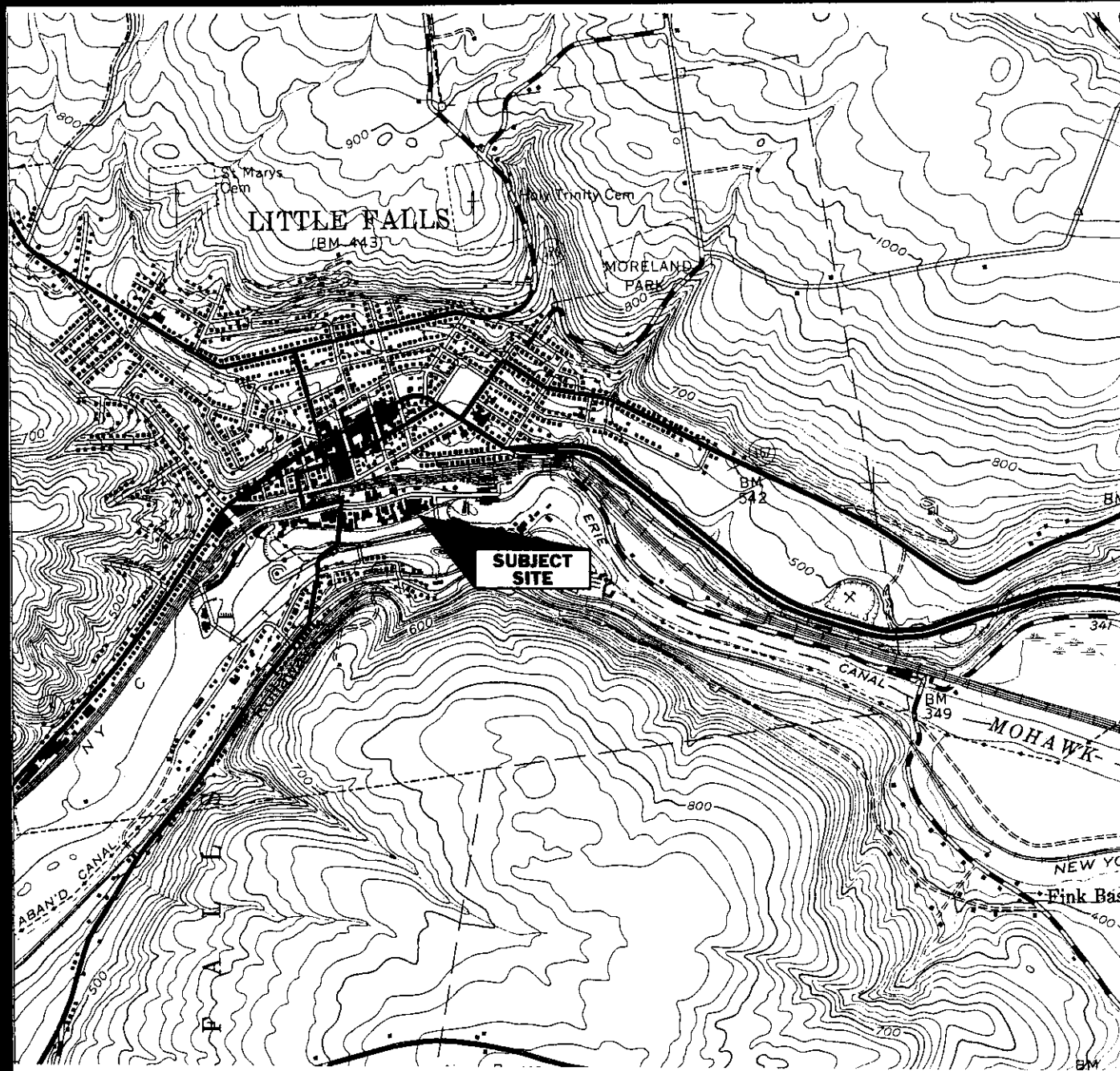
- Excavated on-site soil/fill which appears to be visually impacted shall be sampled and analyzed. If analytical results indicate that the contaminants, if any, are present at concentrations below TAGM 4046 Recommended Cleanup Objectives, the soil/fill can be used as backfill on-site.
- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination.
- Off-site soils intended for use as site backfill cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).
- If the contractor designates a source as "virgin" soil, it shall be further documented in writing to be native soil material from areas not having supported any known prior industrial or commercial development or agricultural use.
- Virgin soils should be subject to collection of one representative composite sample per source. The sample should be analyzed for TCL PAHs, and chromium. The soil will be acceptable for use as backfill provided that all parameters meet the TAGM 4046 Recommended Cleanup Objectives.
- Non-virgin soils will be tested via collection of one composite sample per 500 cubic yards of material from each source area. If more than 1,000 cubic yards of soil are borrowed from a given off-site non-virgin soil source area and both samples of the first 1,000 cubic yards meet TAGM 4046 Recommended Cleanup Objectives, the sample collection frequency will be reduced to one composite for every 2,500 cubic yards of additional soils from the same source, up to 5,000 cubic yards. For borrow sources greater than 5,000 cubic yards, sampling frequency may be reduced to one sample per 5,000 cubic yards, provided all earlier samples met the TAGM 4046 Recommended Cleanup Objectives.



APPENDIX

1. Location Map.
2. Site Remediation Activities Location Map





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Scale: 1" = 2,000'

Site Location Map

Figure No. 1

USGS Quadrangle Map:
Little Falls

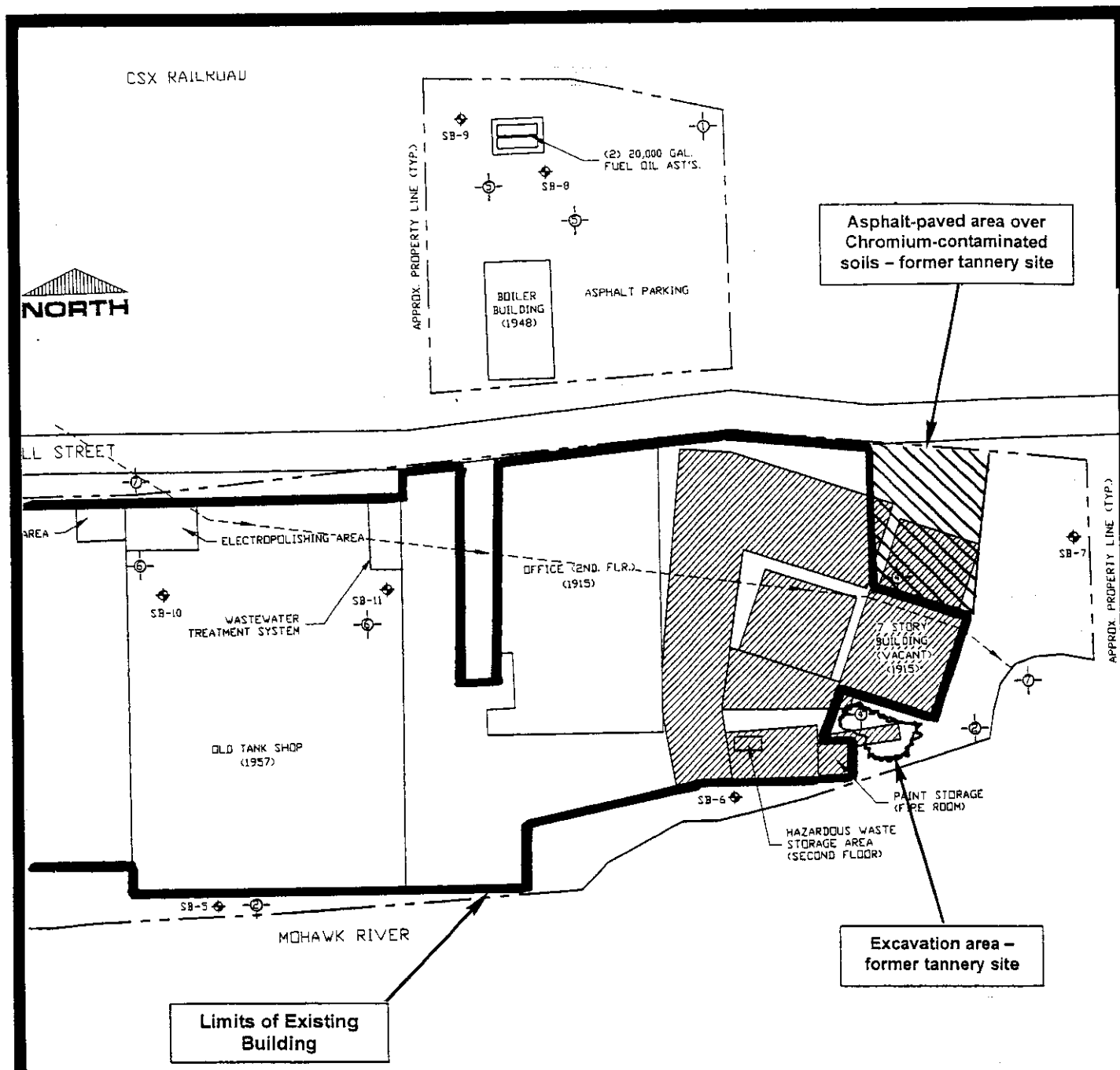
Project: Soils Management Plan
SPX Corporation Property
Little Falls, NY

Prepared By:
WCM

Client: Mr. Daniel McGrade
SPX Corporation
Charlotte, NC

Project Location:
575 East Mill Street,
Little Falls, NY





BUCK ENGINEERING, LLC

Site Remediation Activities Location Map

Figure No. 2

Project: Soils Management Plan
SPX Corporation Property
Little Falls, NY

Client: Mr. Daniel McGrade
SPX Corporation
Charlotte, NC

Prepared By:
WCM

Project Location:
575 East Mill Street,
Little Falls, NY

Approx. Scale: 1" = 100'

**Site Remediation Activities
Location Map**

**SPX Corporation
Little Falls, NY
Base Map Dated: 6/20/99**