UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION III

STATEMENT OF BASIS

MCKINNEY PRODUCTS COMPANY

SCRANTON, PENNSYLVANIA

EPA ID NO. PAD004320248

CONCURRENCES								
MBOL	3LC30	3LC30	3LC00					
RNAME	J. Henry	P. Gotthold	A. Ferdas					
TE	7/20/11	7/20/11	07-7/25/11					

A Form 1320-1 (12-70) OFFICIAL FILE COPY

I. Introduction

A. Facility Name

The United States Environmental Protection Agency ("EPA") has prepared this Statement of Basis ("SB") for the McKinney Products Company Facility (herein after referred to as "McKinney" or "Facility") located at 820 Davis Street, Scranton, Pennsylvania 18505. Please refer to Figure 1 for a site location map.

The Facility is subject to the Corrective Action program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act ("RCRA") of 1976, and the Hazardous and Solid Waste Amendments ("HSWA") of 1984, 42 U.S.C. Sections 6901 to 6992k. The Corrective Action program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and hazardous constituents that have occurred at their property.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating http://www.epa.gov/reg3wcmd/correctiveaction.htm.

B. Proposed Decision

EPA's review of available information indicates that there are no unaddressed releases of hazardous waste or hazardous constituents from the Facility. Based on that assessment, our proposed decision is that no further investigation or cleanup is required. EPA's proposed decision meets the criteria for *Complete without Controls*, established in EPA's RCRA guidance titled: *Final Guidance on Completion of Corrective Action Activities at RCRA Facilities*. This guidance can be found in the Federal Register / Vol. 68, No. 37 / Tuesday, February 25, 2003 / Notices [FRL – 7454-7] pages 8757 to 8764. EPA has determined that its proposed decision is protective of human health and the environment and that no further corrective action or land use controls are necessary at this time.

C. Public Participation

Interested persons are invited to comment on EPA's proposed decision. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Ms. Jeanna R. Henry at the address listed below. EPA will hold a public meeting to discuss this proposed decision upon request. Requests for a public meeting should be made to Ms. Jeanna R. Henry at the address listed below.

EPA has developed an Administrative Record ("AR") for this proposed decision which contains all information considered by EPA during the process. The AR is available at the following location:

U.S. EPA Region III
1650 Arch Street

Philadelphia, PA 19103
Contact: Ms. Jeanna R. Henry (3LC30)
Phone: (215) 814-2820
Fax: (215) 814 - 3113
Email: henry.jeannar@epa.gov

EPA encourages interested persons to participate in the remedy selection process by reviewing this SB and documents contained in the AR. The AR contains the complete information that EPA reviewed prior to this proposed decision.

EPA will address all significant comments received during the public comment period. If EPA determines that new information or public comments warrant a modification to the proposed decision, EPA will modify the proposed decision or select other alternatives based on such new information and/or public comments. EPA will approve its final decision in a document entitled the Final Decision and Response to Comments ("FDRTC"). Any person who comments on the decision will automatically receive a copy of the FDRTC. Any other person wishing to receive a copy of the FDRTC may obtain one by contacting Ms. Jeanna R. Henry.

II. Facility Background

The Facility occupies 16-acres of land in the Borough of Moosic, Lackawanna County, Pennsylvania. The surrounding area includes light industrial, commercial, and residential properties. McKinney has occupied the subject site since 1964 and manufactured metal door hinges and other hardware at the Facility until manufacturing operations ceased in June 2007. ASSA ABLOY (parent company) bought McKinney in 1997 and is the current owner of the Facility. The Facility is currently vacant and all manufacturing equipment, raw materials, and wastes have been removed from the site.

McKinney's manufacturing operations were conducted in a 200,000 square foot building. Operations included stamping component parts (e.g., hinges) from rolled steel, brass, and other alloys, followed by shaping, brushing and polishing. McKinney also operated six (6) immersion electroplating lines for nickel, chrome (trivalent), copper, brass, bronze, and zinc plating. Additional finishing operations included powder coating and painting (solvent-based). Please refer to Figure 2 for a Site Plan of the Facility which identifies the location of McKinney's manufacturing operations and chemical handling/storage areas.

Prior to 1964, the site was owned by Trane who manufactured industrial heating and air conditioning units for hotels and office buildings. The units were made from sheet metal and aluminum coils. The sheet metal was cut, formed, notched, welded, and painted on-site. Trane purchased the site from the Scranton Lackawanna Industrial Building Company ("SLIBC") in 1956. SLIBC constructed the on-site building in 1949, but never performed operations at the Site. SLIBC purchased the site from the Scranton Industrial Development Company ("SIDC") in 1948. During SIDC ownership, the site was undeveloped with no manufacturing operations. SIDC bought the site from an unknown owner in the early 1940s.

III. Summary of Environmental History

A. Hazardous Waste Notification

McKinney submitted an original Notification of Hazardous Waste Activity on July 14, 1980 and received the RCRA EPA ID No. PAD004320248 on October 9, 1980. McKinney then submitted a Part A Hazardous Waste Permit Application to EPA on November 17, 1980 and received interim status on August 5, 1981. Hazardous wastes generated at the site throughout its operational history are classified with the following EPA Hazardous Waste Codes: D001 (ignitable paint wastes), F001 (1,1,1-trichloroethane ("1,1,1-TCA"), tetrachloroethylene ("PCE")), and F006 (electroplating waste water treatment sludge).

B. Description of Solid Waste Management Units

In 1991, a Preliminary Assessment ("PA") of the Facility was conducted by EPA. The findings of the PA were documented in an October 8, 1991 NUS Report titled *Environmental Priorities Initiative Preliminary Assessment of McKinney Manufacturing Company*. The 1991 NUS Report identified ten (10) solid waste management units ("SWMUs") at the Facility, which are as follows:

(1) *SWMU No. 1 – Rag Bucket*
The former 5-gallon Rag Bucket was located on a concrete floor in the print room and was used to accumulate dirty rags containing PCE and petroleum naphtha. The rags were removed for laundering every three (3) months. No releases have been reported from SWMU No. 1.

(2) *SWMU No. 2 – Parts-Cleaning Tank*
The former 35-gallon Parts-Cleaning Tank was located on a concrete floor in the maintenance shop. This unit contained 1,1,1-TCA that was used to degrease parts and equipment. The Parts Cleaning Tank was emptied and cleaned once a year. The spent 1,1,1-TCA was reclaimed on-site in a 1,1,1-TCA distillation unit (SWMU No. 4). Sludge removed from the Parts-Cleaning Tank was combined with other 1,1,1-TCA sludges generated at the Facility and shipped off-site for disposal. No releases have been reported from SWMU No. 2.

(3) *SWMU No. 3 – 1,1,1-TCA Cleaner*
The former 1,1,1-TCA Cleaner was located on a concrete floor in the polishing shop and replaced an older-model 1,1,1-TCA Cleaner in 1989. After deburring and polishing, metal hinges and hardware were cleaned in this enclosed 150-gallon 1,1,1-TCA Cleaner. This unit was cleaned as needed and generated approximately 25-gallons of sludge annually which was shipped off-site for disposal along with sludge from the 1,1,1-TCA Parts-Cleaning Tank (SWMU No. 2) and the 1,1,1-TCA Still (SWMU No. 4). The spent 1,1,1-TCA was placed in drums and reclaimed on-site in the 1,1,1-TCA Still (SWMU No. 4). No releases have been reported from SWMU No. 3.

(4) *SWMU No. 4 – 1,1,1-TCA Still*

The former 1,1,1-TCA Still (50-gallon capacity) was located on a concrete floor in the polishing shop in close proximity to the 1,1,1-TCA Cleaner (SWMU No. 3). The 1,1,1-TCA Still was part of an old 1,1,1-TCA Cleaner that was dismantled and replaced by the former 1,1,1-TCA Cleaner (SWMU No. 3) in 1989. This unit generated approximately four (4) 55-gallon drums of 1,1,1-TCA sludge per year which was shipped off-site for disposal. No releases have been reported from SWMU No. 4.

(5) *SWMU No. 5 – Waste Treatment Room*

The former Waste Treatment Room began operation in 1970 and was used to pre-treat rinse waters and plating solutions containing heavy metals and cyanide prior to being discharged to the Lackawanna River Basin Sewer Authority. This unit generated approximately three (3) 55-gallon drums of wastewater treatment sludge (EPA Hazardous Waste Code F006) per week. The F006 sludge was shipped off-site for metals reclamation.

On March 1, 1990, the Lackawanna River Basin Sewer Authority sampled McKinney's effluent discharge and found it to be in violation of the permit discharge limitations for copper and nickel. McKinney investigated the matter and found that rinse water from an acid stripper used prior to January 1990 by-passed the on-site wastewater treatment system because of its low concentration of metals. In January 1990, the acid stripper was converted to an electrolytic stripper, which used sixteen (16) times the amount of rinse water. As a result of the increase in volume of rinse water that by-passed the wastewater treatment system, there was an increase in nickel and copper in the Facility's effluent. In August 1990, McKinney redirected the electrolytic stripper's rinse water to the on-site wastewater treatment system to be treated prior to discharge. No other releases have been reported for SWMU No. 5.

(6) *SWMU No. 6 – Paint Wastes*

The former Paint Wastes unit consisted of a 55-gallon drum used to accumulate solvent-based paint waste generated by the paint dipping line. The Paint Wastes drum was located on a metal frame shelf over a concrete floor in the paint storage room. Approximately one 55-gallon drum of Paint Waste was generated per year and shipped off-site for disposal. No releases have been reported from SWMU No. 6.

(7) *SWMU No. 7 – Drum Storage Area*

The former Drum Storage Area was located on a loading dock outside the southwestern side of the manufacturing building. This unit was used for the storage of empty drums of 1,1,1-TCA and cutting oils, in addition to full drums of spent 1,1,1-TCA. The empty drums were awaiting pick up by their suppliers and the drums of spent 1,1,1-TCA were awaiting to be distilled in the 1,1,1-TCA Still (SWMU No. 4). No releases have been reported from SWMU No. 7.

(8) *SWMU No. 8 – Hazardous Waste Storage Area*

The former Hazardous Waste Storage Area was located inside a one-story, 25- by 18-foot garage with a concrete foundation that was constructed in 1981. Hazardous and non-hazardous wastes were stored in this unit. Hazardous wastes included 1,1,1-TCA sludge (EPA Hazardous Waste Code F001) and electroplating wastewater treatment sludge (EPA Hazardous Waste Code F006). During a routine inspection by PADEP in March 1986, a 55-gallon drum of F001 was found to have a pinhole leak. The contents of the drum were transferred to another container that was in good condition, and the spilled material was cleaned up and shipped off-site for disposal. No other releases have been report for SWMU No. 8.

(9) *SWMU No. 9 – Plating Solution Treatment Tank*

The former Plating Solution Treatment Tank began operation in 1968 and was located outside the southeastern side of the manufacturing building. This 1,700-gallon tank was used to treat spent nickel plating bath solutions with activated carbon to remove organic contaminants. Spent plating solutions were pumped into the former Plating Solution Treatment Tank, treated, and then returned to their respective plating lines. Sludge removed from this unit was pumped to the Waste Treatment Room (SWMU No. 5) for treatment. No releases have been reported from SWMU No. 9.

(10) *SWMU No. 10 – Dust Collectors*

Four (4) dust collectors were located along the outside of the southeastern side of the manufacturing building. Dust collectors 1 and 2 were first used in 1964; dust collector 3 was first used in 1982; and dust collector 4 was first used in 1990. These enclosed units worked by vortex exhaust and were connected to the polishing and buffing areas in the polishing shop and machining line area via conduits. The dust, which was 90% carbon steel, 5% brass, and 5% steel, was collected in 55-gallon drums connected to the dust collects. The 55-gallon drums were replaced as needed and shipped off-site for recycle as a non-hazardous waste.

During the PA, metal dust was observed on the ground as a fine layer of predominantly rusted steel. Most of the dust was observed between dust collector 1 and the manufacturing building. No other releases have been reported for SWMU No. 10.

C. Summary of Environmental Investigations and Remediation

1. Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment ("ESA") was conducted at the Facility by Cardinal Resources LLC ("Cardinal") between 2005 and 2006. The findings of the Phase I ESA are documented in a report dated October 2006. The purpose of the Phase I ESA was to assess the potential for environmental concerns on the site. Cardinal surveyed the property, reviewed

available reports/information, and contacted regulatory agencies. The Phase I ESA concluded that chemicals historically used on-site included: 1,1,1-trichloroethane ("1,1,1-TCA"), lubricating oils, chlorine, chromium, copper, nickel, cyanide, sodium hydroxide, and sulfuric acid. In addition, the Cardinal Resources Phase I ESA identified eight (8) areas referred to as recognized environmental conditions ("RECs") at the Facility where releases may have occurred.

2. Phase II Environmental Site Assessment

As a follow up, Cardinal developed a Phase II ESA Work Plan to address all of the RECs. The objective of the Phase II ESA was to identify real soil, groundwater, and indoor air impacts that may have been caused by historic use of the site or from background or upgradient sources. The investigation was conducted from July 30 through August 10, 2007. The results of the Phase II ESA are presented in a report dated August 2007. The work included: soil sampling of areas inside and around the building to evaluate potential impacts from historic site use; groundwater sampling to evaluate current groundwater conditions; and, soil gas sampling to identify potential indoor air issues.

- Soil Sampling: Twenty-two (22) soil borings were drilled at the site, and one soil sample was collected from each boring. The selected soil sampling locations were chosen because these locations had the highest likelihood of environmental impacts from historical site use. Depending upon the activities at each sampling location, the soil samples were analyzed for volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); metals; cyanide; and polychlorinated biphenyls (PCBs). Please refer to Figure 3 for soil sample location map.

- Groundwater Sampling: Four (4) exploratory borings were drilled through unconsolidated material and into bedrock for the evaluation of groundwater conditions hydraulically upgradient and downgradient of the Facility. In developing the July 2007 Work Plan, it was anticipated that monitoring wells would be installed within the first water-bearing unit encountered in each of the borings. However, during the field work, groundwater was not encountered to a drilling depth of 175 below ground surface (bgs). In addition, mine voids were encountered 92 to 118 feet bgs and the void areas ranged in thickness between 8 and 21 feet. Therefore, the proposed groundwater monitoring wells could not be installed due to the lack of groundwater and the presence of mine voids. It is suspected that the voids are related to historic mining and that this has disrupted the normal flow of groundwater in the region. Please refer to Figure 4 for a proposed monitoring well location map.

3. Remediation of PCB Contamination

On October 7, 2010, a PPL crew discovered three (3) 500k VA transformers at the subject site had been vandalized. As a result, the three (3) transformers had been drained of their oil, estimated to be 240 gallons total. The PCB content was unknown; however, it was assumed that the oil contained PCBs. A total of thirty-six (36) 20-cubic yard roll-off containers (approximately 446 tons) of impacted soils were excavated and forty-four (44) 55-gallon drums of material (40 drums of oily water; 4 drums of PCB-impacted PPE, absorbents, etc.) were

removed from the site. An oil sample was collected and found to contain PCBs at a concentration of 288 parts per million (ppm).

PPL verified the success of the cleanup with a total of 40 post-remediation samples, all of which were non-detect for PCBs. The remediated area was backfilled and restored upon completion of soil removal and post-remediation sampling.

D. Evaluation of Exposure Pathways

1) Direct Contact with Soils Pathway

Facility soils were analyzed for a total of 109 chemicals, including VOCs, SVOCs, metals, cyanide, and PCBs. The results of the twenty-two (22) soil samples collected from the site were compared to EPA Region 3's Risk Based Screening Levels ("RSLs") (May 2010 Table) for the 10^{-6} risk. Soil samples were also compared to PADEPs Act 2 Program *Residential* Medium Specific Concentrations ("MSCs").

A total of twenty-nine (29) chemicals were detected in soils at the Facility; however, none of the chemicals detected were at concentrations exceeding their respective EPA RSLs or PADEP Residential MSCs. Therefore, EPA has concluded that no potential unacceptable human health risks are posed by direct contact with Facility soils. For a summary of chemicals detected in soils at the Facility, please refer to Table 2 (presented in the Phase II ESA) included as Attachment 1 to this SB.

2) Direct Contact with Groundwater Pathway

Direct contact with groundwater at the Site does not pose a viable exposure pathway as groundwater was not encountered at the site at depths to at least 175 feet bgs.

3) Soil and Groundwater Indoor Air Pathways Evaluation:

Groundwater was not encountered at the site at depths to at least 175 feet bgs and is therefore not considered a viable migration pathway for VOCs into indoor air at or in the vicinity of the site. None of the twenty-two (22) soil samples collected from potentially impacted areas based on historic site use were found to contain contaminants exceeding their selected soil or soil-to-groundwater MSCs, which indicates that no significant source of subsurface contamination that could pose a threat to indoor air quality was identified.

Even though the soil sampling results did not identify a potential threat to indoor air, seven (7) soil gas samples were concurrently collected with the soil samples. The analytical results were initially compared to PADEPs Nonresidential Indoor Air Criteria. If the soil gas results are below the indoor air criteria, it is assumed that there are no impacts to indoor air in the building. However, several of the chemicals detected exceeded the indoor air criteria. The PADEP guidance allows the screening out of the vapor intrusion pathway if an attenuation factor of 0.01 is applied to soil gas results, i.e., if the concentrations of VOCs in the soil gas are less than 100 times their respective indoor air criteria. No VOC identified in any of the seven (7) soil

gas samples exhibited a concentration in excess of 100 times the indoor air criteria and therefore the site screens out of the indoor air vapor intrusion pathway per current PADEP regulations.

EPA as a first approach utilizes a shallow soil gas 10 times indoor air criteria option to screen a site out of the vapor intrusion pathway. Comparing the soil gas results to EPA's generic target shallow soil gas for Indoor Air at the 10-5 risk level, indicates exceedances for a few of the VOCs detected including benzene, ethylbenzene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, and 1,2,4-trimethylbenzene. The unconsolidated subsurface beneath the facility is made up predominantly of sandy silts/silty sands. Based on this type of soil, the EPA guidance allows for the selection of a more site-specific attenuation factor from soil gas to indoor air of 0.001. When this attenuation factor is applied to the soil gas concentrations of the VOCs mentioned above, there are no longer any exceedances of any of EPA's indoor air criteria and the site screens out of the vapor intrusion pathway.

To further document that the indoor air pathway is not complete, McKinney Products Co. utilized the Johnson and Ettinger model for subsurface vapor intrusion using site-specific information. The incremental risks for any carcinogenic COC and the hazard quotient for the noncarcinogenic COCs were calculated using the model. Results of the modeling showed that the risks to site workers from the COC present in soil gas is at least an order of magnitude below EPA's most protective risk based levels (10^{-6} for carcinogens and 1.0 for non-carcinogens).

E. Summary of EPA's Proposed Decision

EPA has concluded that the soil and groundwater quality at the Facility does not pose any potential for harm to human health or the environment and no further action or controls are necessary for the Facility. This determination is based on a review of all available records, in addition to information collected during a September 27, 2006 and May 25, 2011 site visit, which show that there have been no reportable releases; there is no evidence of current soil or groundwater contamination above EPA's RSLs and PADEP's Residential MSCs; and, there is no on-going site remediation or monitoring efforts at this Facility.

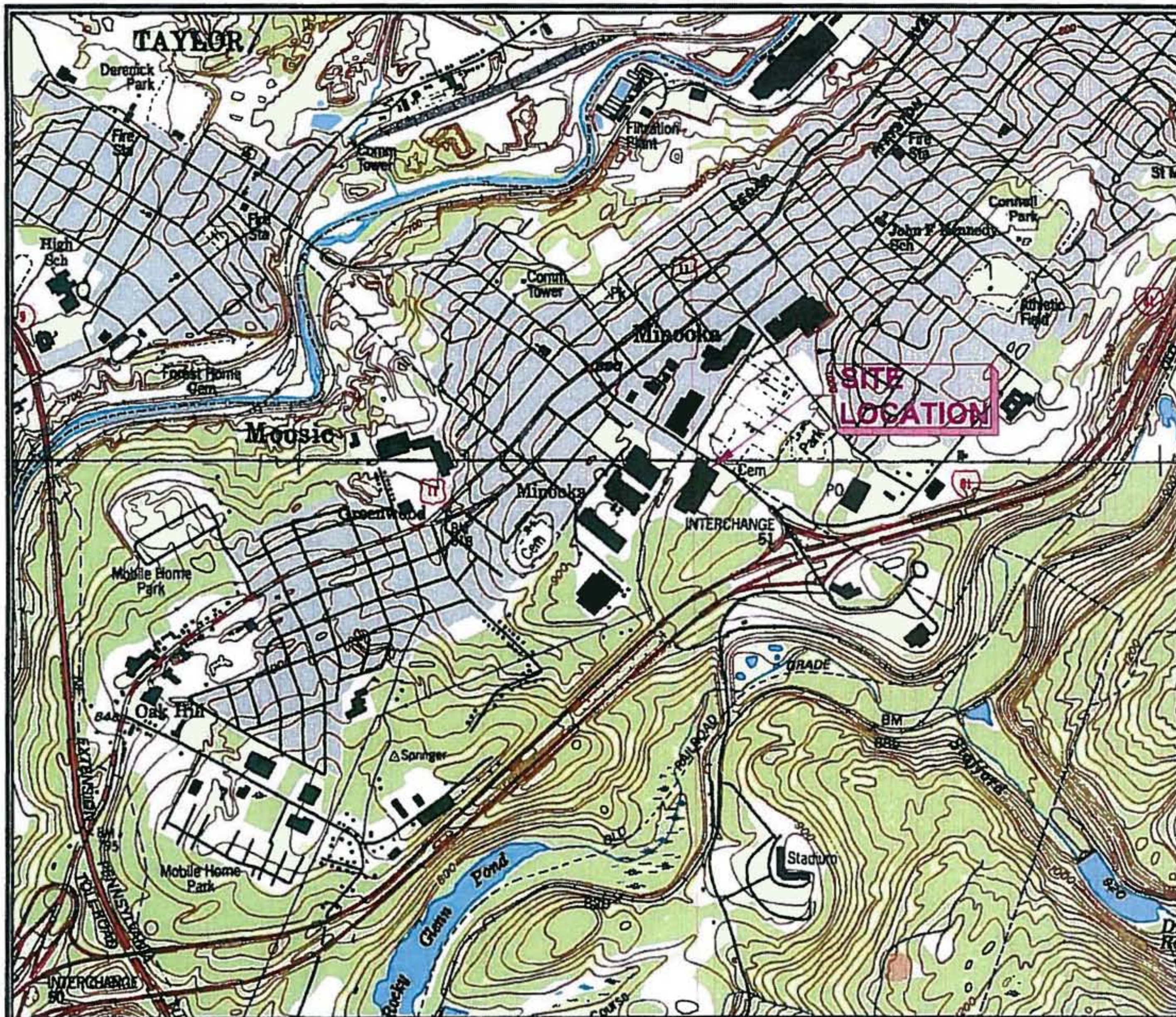
Date: 7/25/11

Abraham Ferdas, Director
Land and Chemicals Division
US EPA, Region III

Figure 1

Site Location Map

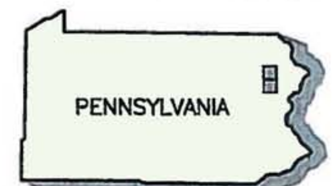
McKinney Products Company
Scranton, Pennsylvania



2,000'　0　2,000'

SCALE IN FEET

LEGEND:



QUADRANGLE LOCATIONS

SOURCE:
USGS TOPOGRAPHIC QUADRANGLE MAPS "AVOCA, PENNSYLVANIA", & "SCRANTON, PENNSYLVANIA" DATED 1994, AT A SCALE OF 1:24,000.

CARDINAL RESOURCES

McKINNEY PRODUCTS COMPANY
MOOSIC, PENNSYLVANIA

105-0037

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
1							
0	ECM	10/25/05	INITIAL ISSUE	JMO		JMO	

FIGURE 1

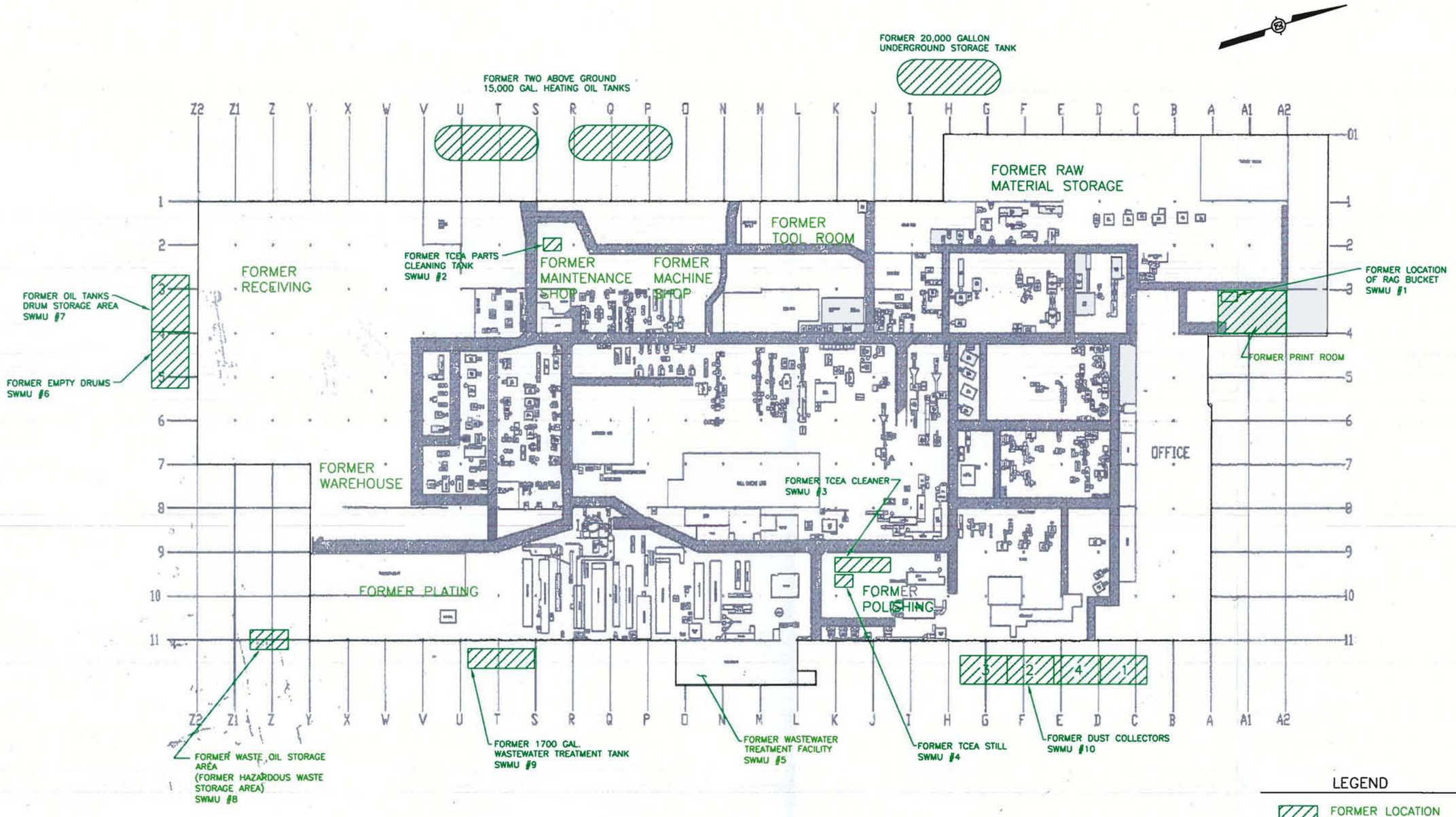
SITE LOCATION MAP

CADD FILE	9135	SCALE	AS NOTED	CURRENT DATE:	10-25-2005
DRAWING NO.	105-0037-0100-01			REVISION	0

Figure 2

Site Plan

McKinney Products Company
Scranton, Pennsylvania



NOT TO SCALE

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
2	WTS	07/20/11	REVISED DUST COLLECTORS TO FORMER				
1	WTS	07/18/11	REVISED ITEMS TO FORMER ITEMS				

McKINNEY PRODUCTS COMPANY
MOOSIC, PA

SITE PLAN

105-0037

CURRENT DATE	07/13/11	WTS	SITE PLAN REVISED

DRAWING NO.	1 OF 1	SCALE	SITE PLAN

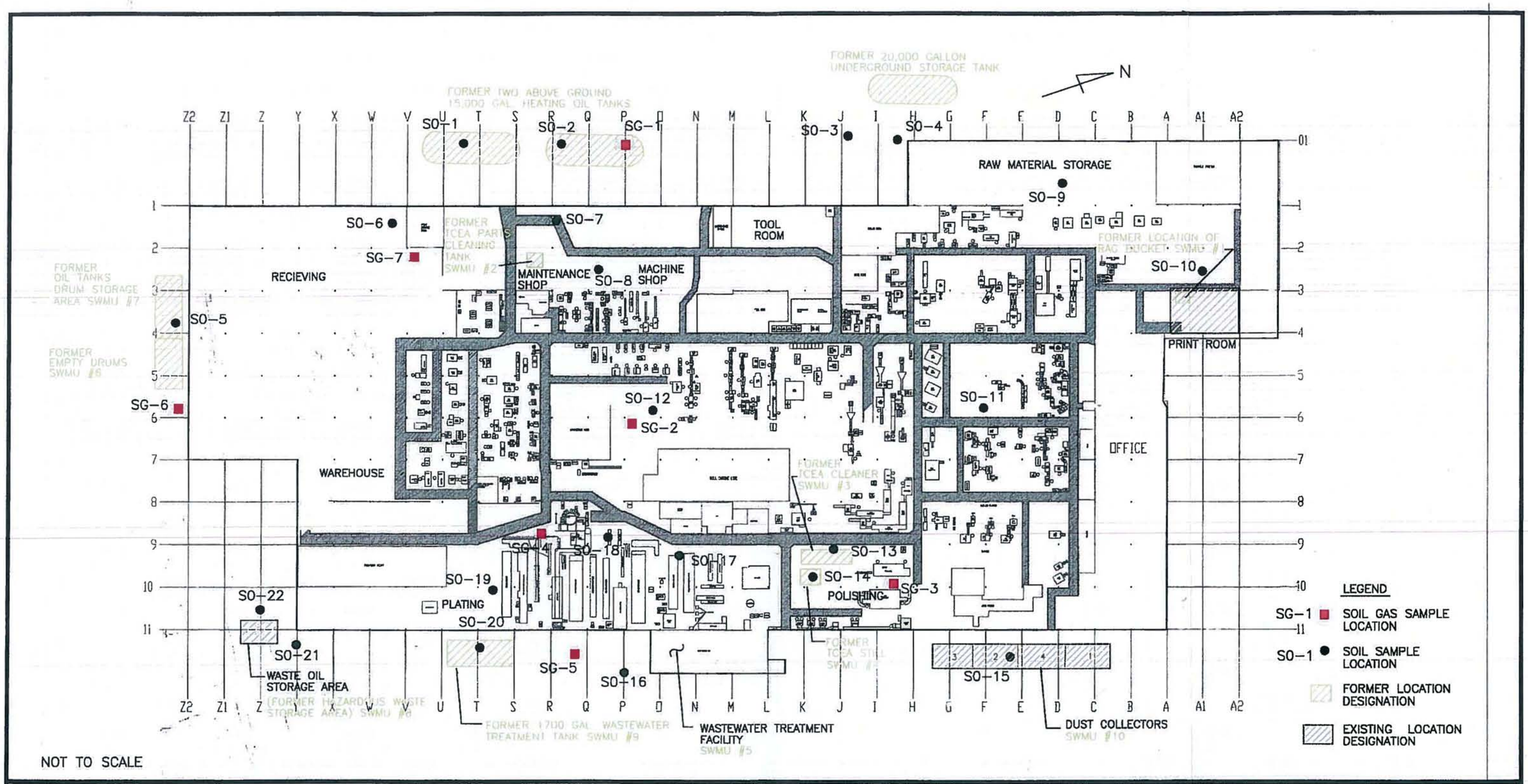
CARDINAL RESOURCES

REVISION

Figure 3

Soil Sample Location Map

McKinney Products Company
Scranton, Pennsylvania



NOT TO SCALE

McKINNEY PRODUCTS COMPANY
MOOSIC, PA

FIGURE 2
SOIL AND SOIL GAS SAMPLING LOCATIONS
105-0037

CADD FILE	105-0037	CURRENT DATE:	6-22-07
DRAWING NO.	105-0037-B1	REVISION	

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE

CARDINAL RESOURCES

Figure 4

Proposed Monitoring Well Location Map

McKinney Products Company
Scranton, Pennsylvania

LEGEND:

●MW-1 EXPLORATORY BORING LOCATION

McKINNEY PRODUCTS COMPANY
MOOSIC, PA

FIGURE 3
EXPLORATORY BORING LOCATIONS

CARDINAL RESOURCES

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
1							
0			INITIAL ISSUE				

CADD FILE		DATE	08/21/2007
DRAWING NO.	105-0037-0500-02	SCALE:	NO SCALE

REVISION 0

Attachment 1

Table 2
Analytical Results – Soil

McKinney Products Company
Scranton, Pennsylvania

Table 2
Analytical Results - Soil
McKinney Products Company
Moosic, Pennsylvania

Sample I.D.	Sample Location	Date	Metals					Semivolatile Organic Compounds																	Volatile Organic Compounds					
			Chromium III/Chromium VI[1]	Copper	Lead	Nickel	Zinc	Acenephthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Bis(2-Ethylhexyl)phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Acetone	1,1-Dichloroethane	1,1-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	Trichloroethene
PADEp Act 2 MSCs, Residential, Direct-Conact, 0 to 15 feet			190,000/ 660	8,100	500	4,400	66,000	13,000,000	66,000,000	5,700	570	5,700	13,000,000	57,000	1,300,000	900,000	570,000	570	220,000	8,800,000	8,800,000	5,700	4,400,000	66,000,000	6,600,000	10,000,000	280,000	3,800,000	1,100,000	10,000,000	260,000
PADEP Act 2 MSCs, Soil to Groundwater Used Aquifer Residential 100 x GW Standard[2]			10/10	100	0.5	10	200	220,000	6,600	29	20	29	26	55	600	3,300	190	2.9	3,700	26,000	150,000	29	10,000	110,000	13,000	3,300,000	3,100	700	10,000	20,000	500
PADEP Act 2 MSCs, Soil to Groundwater Used Aquifer Residential Generic Value[2]			190,000/ 190	43,000	450	650	12,000	2,700,000	350,000	25,000	46,000	40,000	180,000	610,000	130,000	21,000	230,000	13,000	95,000	3,200,000	3,000,000	2,200,000	25,000	10,000,000	2,200,000	370,000	750	190	2,300	7,200	170
PADEP Act 2 MSCs, Non-Residential, Direct-Contact, 0 to 2 Feet			190,000/ 8,400	100,000	1,000	56,000	190,000	170,000,000	190,000,000	110,000	11,000	110,000	170,000,000	1,100,000	5,700,000	4,000,000	11,000,000	11,000	2,800,000	110,000,000	110,000,000	110,000	56,000,000	190,000,000	84,000,000	10,000,000	1,400,000	10,000,000	4,800,000	10,000,000	1,300,000
PADEP Act 2 MSCs, Non-Residential, Direct-Contact, 2 to 15 Feet			190,000/ 20,000	190,000	190,000	190,000	190,000	190,000,000	190,000,000	190,000,000	190,000,000	190,000,000	190,000,000	190,000,000	10,000,000	190,000,000	190,000,000	190,000,000	1,900,000	190,000,000	190,000,000	190,000,000	190,000,000	190,000,000	190,000,000	10,000,000	1,600,000	10,000,000	5,500,000	10,000,000	1,500,000
PADEP Act 2 MSCs, Soil to Groundwater Used Aquifer Non-Residential 100 x GW Standard[2]			10/10	100	0.5	10	200	380,000	6,600	360	20	120	260	55	600	13,000	190	36	10,000	26,000	190,000	360	10,000	110,000	13,000	9,200,000	16,000	700	10,000	20,000	500
PADEP Act 2 MSCs, Soil to Groundwater Used Aquifer Non-Residential Generic Value[2]			190,000/ 190	43,000	450	650	12,000	4,700,000	350,000	320,000	46,000	170,000	180,000	610,000	130,000	83,000	230,000	160,000	260,000	3,200,000	3,800,000	28,000,000	25,000	10,000,000	2,200,000	1,000,000	3,900	190	2,300	7,200	170
		Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
SO-1 - 11-12	Former AST	08/02/07	NA	NA	NA	NA	NA	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	NA	NA	NA	NA	NA	NA
SO-2 - 13-14	Former AST	08/02/07	NA	NA	NA	NA	NA	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	NA	NA	NA	NA	NA	NA
SO-3 - 0.5[3]	Transformer	08/01/07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SO-4 - 0.5[3]	Transformer	08/01/07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SO-5 - 5-6	Loading dock (former drum storage)	08/02/07	7.2	15	12	21	44	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	27	<5.7	26	26	1,500	11
SO-6 - 8-9	Paint storage	08/01/07	4	14	10	11	36	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	<390	31	<5.9	<5.9	<5.9	<5.9	<5.9
SO-7 - 4-5	Former TCE parts cleaning tank in maintenance shop	07/31/07	8.8	15	10	14	38	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	25	<5.7	<5.7	<5.7	<5.7	<5.7
SO-8 - 12-13	Machine shop	07/31/07	5.8	17	10	16	52	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	12	<5.6	<5.6	<5.6	<5.6	<5.6
SO-9 - 14-15	Raw material storage	07/31/07	8.3	18	12	16	53	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	23	<5.7	<5.7	<5.7	<5.7	<5.7
SO-10 - 12-13	Outside of print room	07/31/07	5.7	19	12	16	47	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	19	<5.6	<5.6	<5.6	<5.6	<5.6
SO-11 - 2-3	Machining lines	07/31/07	8.5	23	14	8.8	34	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	29	<5.7	<5.7	<5.7	<5.7	<5.7
SO-12 - 5-6	Paint and powder lines	08/01/07	8.7	19	12	19	54	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<430	<220	<220	<220	<220	<220
SO-13 - 4-5	Former 1,1,1-TCA cleaner in polishing shop	08/01/07	NA	NA	NA	NA	NA	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<400	<200	<200	<200	<200	<200
SO-14 - 3-4	Former 1,1,1-TCA still in polishing shop	08/01/07	NA	NA	NA	NA	NA	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	13	<5.5	<5.5	<5.5	<5.5	<5.5
SO-15 - 2-3	Dust collectors	08/03/07	10	24	13	17	66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SO-16 - 3-4	Outside of wastewater treatment facility	08/02/07	7.4	16	15	82	56	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	<380	24	<5.7	<5.7	<5.7	<5.7	<5.7
SO-17 - 3-4	Dry chemical storage room	07/31/07	5.3	17	10	18	54	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<390	<190	<190	<190	<190	<190
SO-18 - 1-2	Plating lines	07/31/07	7.2	21	37	26	94	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<370	<11	<5.5	<5.5	<5.5	<5.5	<5.5
SO-19 - 3-4	Plating lines	07/31/07	9.7	20	30	37	84	<350	<350	<350	<350	<350	<350	<350	700	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	19	<5.2	<5.2	<5.2	23	<5.2
SO-20 - 3-4	Former wastewater treatment tank	08/02/07	7.9	10	54	9.4	39	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	<360	430	57	<5.4	<5.4	<5.4	14	34
SO-21 - 3-4	Waste oil storage area	08/02/07	8	17	65	10	36	2,500	1,900	3,400	2,900	4,200	1,400	1,400	<380	1,300	3,400	420	830	6,800	1,400	1,500	1,100	<1,900	6,400	63	<5.8	<5.8	<5.8	220	<5.8
SO-22 - 3-4	Waste oil storage area	08/02/07	6.8	12	55	11	37	<360	<360	920	750	1,100	380	370	<360	<360	960	<360	<360	1,900	<360	380	<360	1,200	1,600	52	14	7.3	7.3	1,300	<5.5

Notes:
[1] Chromium III/Chromium VI standards
[2] Act 2 allows the use of the 100 X GW Standard, the Generic Value, or the SPLP.
[3] Samples were analyzed for PCBs only; results were less than the reporting limit.
NA = Not available/not analyzed
Shaded MSCs were the selected standard.