Insilco Corporation

Phase I Environmental Site Assessment and Limited Compliance Review Stewart Stamping Corporation Yonkers, New York

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EXECUTIVE SUMMARY

Environmental Resources Management - Northeast (ERM) completed a Phase I Environmental Assessment of the Stewart Stamping Corporation facility (the facility, or Subject Property) located at 630 Central Park Avenue in Yonkers, New York.

The facility manufactures metal parts for the automotive and electronics components industries in several high speed stamping processes. There are also finishing processes including plating, polishing, and heat treatment performed at the facility. The facility is a source of regulated air emissions, wastewater discharges, and hazardous waste. Principal raw materials in use at the facility consist of coiled steel, steel alloy, and copper; plating chemistry; lubricant; and hydraulic oil.

The facility consists of approximately 350,000-square feet of building space on an approximately 4-acre property. An estimated 70 percent of the building houses manufacturing operations, with the remainder used for warehousing and offices. Stewart Stamping has operated at the Central Park Avenue location since approximately 1942. The facility was reportedly constructed in approximately 1930 as a warehouse for the Wannamaker Department Stores on previously undeveloped land.

ERM identified Recognized Environmental Conditions (RECs) at the facility, which are summarized below and are discussed in greater detail in the body of the report.

RECOGNIZED ENVIRONMENTAL CONDITIONS

Plating Chemical Spillage and Historic Operations

The plating room at the facility has been reportedly used for metal parts finishing throughout most of the facility's operational history. ERM noted areas of plating chemical spillage within concrete berms under the plating lines and in concrete sluices and sumps used to convey these chemicals to the on-site wastewater pretreatment facility. Several of these containment areas appear to have been recently lined with chemical-resistant synthetic liners, and other areas do not have such liners. The plating room floor was recently refinished, and a former wastewater collection sump was filled and covered in the process. The condition of this sump at the time

of closure is unknown. Historic operations in this area present a concern for releases of plating chemistry to the environment.

Historic Chlorinated Organic Solvent Degreasing/Solvent Use

Substantial quantities (approximately 30 tons annually) of methylene chloride and trichloroethylene are used for parts cleaning at the facility. Certain metal product lines are finished in two (2) vapor degreasers at the facility. The older vapor degreaser, in operation for at least 20 years, is set in a concrete sump. The condition of this sump beneath the degreaser is unknown as it reportedly has never been inspected. Historic operations in this area present a concern for releases of solvents to the environment. Little is known regarding historic degreasing operations or practices at the facility.

Former Underground Storage Tanks

Six (6) underground tank systems were closed in place at the facility in 1996. Two (2) of these underground storage tanks (USTs) contained water storage (8,000 gallons each). The remaining four (4) USTs contained No. 4 fuel oil (two 3,000 gallon USTs, and two 5,000 gallon USTs). These tanks were tested and found to be tight. They were then filled with a concrete slurry mix and closed in place. There was no subsurface sampling conducted to verify conditions as part of the UST closure.

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1.1 PURPOSE AND AUDITORS

Environmental Resources Management (ERM) performed a Phase I Environmental Assessment of the Stewart Stamping Corporation located at 630 Central Park Avenue in Yonkers, New York (the facility, or Subject Property). The environmental assessment was performed for Insilco Corporation in anticipation of a financial transaction involving the facility.

The site visit was performed on 28 August 2002 by ERM auditor Matt Gallo, CPEA. ERM was accompanied on the site visit by Mr. Ed Rish, Director of Quality Control. Additional information was provided in brief meetings/interviews with Phil Rejeski, Facility Manager, and Weily Tung, Plating Supervisor.

1.2 SCOPE OF WORK

This environmental assessment was conducted in conformance with ERM's proposal dated 26 August 2002 and in general with the requirements of ASTM Standard E1527-00; Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

The assessment was conducted to evaluate the potential for environmental impacts on the subject property as a result of past or current activities on the property or surrounding properties. ERM's Phase I Environmental Assessment included:

- an on-site inspection of the subject property to evaluate current conditions and identify areas of potential concern;
- a review of property history through interviews and aerial photographs, and historical mapping;
- observation of adjacent properties and the local area to evaluate the potential for adverse environmental impact the subject property;
- contracting of Environmental Data Resources (EDR) to identify sites of concern as required in the regulatory records review section of the ASTM standards for a Phase I Environmental Site Assessment. The information presented in the EDR report was supplemented by

telephone interviews of regulatory personnel and file reviews, as appropriate; and

 a preliminary building asbestos assessment that included visible observations of readily accessible building areas, though no sampling.

Property environmental records or permits, reasonably obtainable at the time of the site visit, were reviewed and discussed in this report, as appropriate.

1.3 LIMITATIONS

This report is based upon the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations. Professional judgments expressed herein are based on the facts currently available within the limits of the existing data, scope of work, budget, and schedule. We make no warranties, expressed or implied, including, without limitation, warranties as to merchantability or fitness for a particular purpose. In addition, the information provided in this report is not to be construed as legal advice.

A Phase I assessment, as defined by the ASTM Standard is not intended to be a formal survey for lead-based paint, lead in drinking water, asbestos containing materials (ACM), urea formaldehyde insulation, ozone-depleting chemicals or radon. These areas are beyond the scope of a Phase I as it is defined by ASTM Standard E 1527-2000.

ERM is not engaged in environmental auditing and reporting for the purpose of advertising, sales promotion, or endorsement of any client's interests, including raising investment capital, recommending investment decisions, or other publicity purposes. The client acknowledges that this report has been prepared for the exclusive use of the client and agrees that ERM reports or correspondence will not be used or reproduced in full or in part for such purposes, and may not be used or relied upon in any prospectus, offering circular, or similar document. Client also agrees that none of its advertising, sales promotion, or other publicity matter containing information obtained from this audit and report will mention or imply the name of ERM.

1.4 LIMITING ON-SITE CONDITIONS

Limiting conditions were encountered during the site visit. The old boiler room (currently inactive) was locked and not accessible. This room reportedly contains asbestos-containing material (ACM) and has been sealed off to prevent exposure.

A residential dwelling is present on the north side of the manufacturing facility building. This dwelling was recently acquired by Stewart Stamping Corporation, and is reportedly unoccupied at the time of the assessment. There are reportedly no industrial or commercial activities performed at this location. The interior of the structure was not accessed during the site inspection; however, the grounds surrounding the structure were inspected and no conditions of environmental concern identified.

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2.1 LOCATION

The facility is at the southeast corner of Whittier Avenue and Central Park Avenue, adjacent to the east of the Thomas Dewey Thruway in Yonkers, Westchester County, New York. The general location of the property and the physiographic features of the surrounding area are shown on Figure 1, developed from the United States Geological Survey (USGS) 7.5 minute quadrangle for the site.

2.2 NEIGHBORING PROPERTIES

The abutting properties include:

- North: Whittier Avenue and residential properties;
- <u>East:</u> Trechard Street and residential areas;
- South: Kettel Avenue, a car dealership, and residential areas; and
- West: Central Park Avenue and the Thomas Dewey Thruway (I-87).

Based on ERM's observations, the closest residence is immediately adjacent to the east of the site. However, residences are located within one-eighth mile towards the south and north as well. No visual evidence of environmental concerns was observed on other immediately-surrounding properties.

2.3 TOPOGRAPHY AND HYDROLOGY

The topography of the Subject Property gently slopes from a topographic high of approximately 210 feet Mean Sea Level (MSL) in the western portion of the site, to approximately 200 feet MSL in the northeast corner of the site. The site is located about equidistant between the Bronx River and the Saw Mill River, however the terrain slopes southeast toward the Bronx River, therefore this is the likely ground water flow direction.

No suspected wetlands areas were observed on the subject property, which, according to the Environmental Data Resources (EDR) report (Appendix B) is outside the 100-year floodplain.

2.4 GEOLOGY AND HYDROGEOLOGY

Site specific geology and hydrogeology information was not available during the audit. ERM was able to obtain soil information from the US Department of Agriculture Soil Survey for Westchester County. The geology of Westchester County is comprised of Precambrian metamorphic bedrock overlain by a thin veneer of Quartenary age alluvial sedimentary deposits. The bedrock is metamorphic and generally of three (3) formations: Manhattan schist; Fordham gneiss; and Inwood marble. Manhattan schist and Fordham gneiss are generally found throughout the County in irregular bands. The Inwood marble occurs as south to north trending bands defining river channels such as the Bronx, Croton, and Saw Mill rivers.

The overlying unconsolidated deposits consist of clays, fine to coarse sands and gravels and tills. The sand and gravel deposits are generally thin and of relatively small areal extent grading vertically and horizontally into fine grained and less permeable deposits. Till, the most widespread unconsolidated deposit, ranges in thickness from a few feet or less on hilltops to more than 100 feet in some of the larger valleys. The material is poorly sorted with grain sizes ranging from clay to boulders.

The two nearby river valleys (Bronx and Saw Mill Rivers) contain some stratified sand and gravel deposits that may be moderately permeable (well yields 10 to 100 gallons per minute). However, the Subject Property is on higher ground between these valleys where there is likely only a thin veneer of glacial till overlying bedrock. The till is generally very low in permeability. Published data indicates that the water table within the till unit in the area of the Subject Property. The ground water flow direction in the underlying fractured rock cannot be predicted based on the available information.

Yonkers is serviced by the New York City public water system. The Catskill Aqueduct is about 2,000 feet east of the site and the Hillview Reservoir is about 3,000 feet southeast (both in the assumed upgradient direction).

It is important to note that groundwater flow direction can be influenced locally and regionally by the presence of local wetland features, surface

topography, recharge and discharge areas, horizontal and vertical inconsistencies in the types and location of subsurface soils, and proximity to water pumping wells.

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SITE AND OPERATIONS INFORMATION

3.1 GENERAL SITE DESCRIPTION

The facility consists of approximately 350,000-square feet of manufacturing, warehouse, and office space in a single building on an approximately 4-acre property. The Subject Property is owned by Insilco Corporation. An estimated 70 percent of the building houses manufacturing operations, with the remainder used for warehousing and offices. A description of the site processes and material use is provided in Section 3.3. A site plan is provided as Figure 2.

The main building at the facility houses most manufacturing operations as well as administrative offices. The building was constructed in multiple phases, with the original portion of the structure dating to approximately 1930. Offices are located on the second floor in the western portion of the building, along Central Park Avenue. The building is two stories (with limited basement areas) and is constructed of concrete block and brick with a concrete floor and metal roof.

Manufacturing operations are located on the first and second floors in the original portion of the building to the east of the office area. The second floor contains the Cap End Leads department. There is also a warehouse area, small metallurgical laboratory, and a tool room on the second floor where Cap End Lead machines are built and fitted.

The first floor contains the press rooms where metal parts are "stamped" from metal coils and rods. There are several degreasers for cleaning parts prior to packaging and shipping to customers.

Certain product lines are not degreased, but plated instead. These parts are brought to the Mass Finishing area on the first floor where they are cleaned and plated in various processes (see Section 3.3). Other operations on the first floor include tool rooms for fitting of the presses on the first floor, a compressor room with four (4) natural gas-fired compressors, shipping/receiving, raw materials storage, and maintenance.

There are limited basement areas at the facility. One area contains the former boiler room. This room reportedly contains asbestos-containing materials and has been sealed off to prevent entry and exposure. This

area could not be accessed during the site inspection. Another basement area contains three (3) No. 2 fuel oil-fired boilers.

Raw material chemicals are received at the site in 55-gallon drums or smaller containers, and stored on containment pallets in the specific areas that utilize the materials. An exception is plating chemicals, which are stored in the waste treatment area. Hazardous waste is stored in waste treatment (F006 sludge) and in an area near the shipping department (F001).

3.2 UTILITIES

The facility is provided with:

- Water from the New York City Reservoir System;
- Sewer from the Westchester County Department of Environmental Facilities - Yonkers Joint Wastewater Treatment Plant (process, sanitary, and storm water);
- Electricity from Consolidated Edison; and
- Natural gas by Consolidated Edison.

The buildings on the subject property are equipped with a centralized heating, ventilation and air conditioning (HVAC) systems.

3.3 PROCESSES AND MATERIAL USE

3.3.1 Current Operations

The facility's operations consist of: stamping and cutting of metal parts in presses and other machines; cleaning/degreasing of parts; finishing (plating) of certain product lines; and wastewater treatment. Ancillary operations include: warehousing; shipping/receiving; tooling of various presses and other metal fabrication machines; maintenance; and engineering/administration functions. Primary product end use is in the automotive and electronics components (circuit breakers and in circuit board diodes and components). The facility operates under SIC Codes 3471 and 3469.

Cap end leads are the metal leads that protrude from many circuit board diodes and components. The cap ends are stamped from metal coils on presses on the first floor, silver plated in the plating operation (first floor), and fitted onto end leads (cut from a spool of wire) on Cap End Lead machines on the second floor. Chemical usage in these areas consists of lubricants and mineral spirits (Varsol).

Metal parts are "stamped" on large press machines on the first floor. These machines generally use lubricants, both in internal machine hydraulics and on the metal parts in the stamping process. Certain machines also have small reservoirs where stamped parts are "cold" degreased in trichloroethylene. Other parts are degreased in several "portable" Ultronix degreasers (110 gallon capacity) that can be moved to different product lines, as required. Large scale degreasing is conducted in two vapor degreasers: (1)a Pero closed loop vapor degreaser was installed in 1996 and uses trichloroethylene (150 gallon capacity); and (2) an older methylene chloride "open top" vapor degreaser (this unit has been fitted with a lid) has been reportedly used at the site for at least 20 years, and is installed in a concrete sump.

Shavings and cuttings from machining are collected at each machine and accumulated in drums for recycling. The machining operations use a water-soluble coolant/cutting oil that is collected in drums and recycled on-site. The recycling process consists of settling in 55-gallon drums, pumping off the oil through a filter, and storage for reuse in two (2) 500-gallon above ground storage tanks. Solids and unusable oil from this process is disposed of off-site as non-hazardous waste.

Metal parts destined for plating are processed in tumblers using a detergent and abrasive media to remove burs prior to plating. These parts are then brought to the Plating Room for final finishing. There were seven (7) discrete plating lines present during the site inspection. Each line consists of several process tanks ranging in size from 250 gallons to 500 gallons. These lines are listed below, with a brief process description:

- 1. <u>Barrel Silver Plating</u>: clean/rinse; acid activation; cold water rinse; copper plate; cold water rinse; silver plate; cold water rinse.
- 2. <u>Barrel Copper Alkaline Tin Line Plating</u>: cyanide activation; copper plate; cold water rinse; alkaline bath; cold-water rinse.
- 3. <u>Barrel Copper Bright Tin Plating</u>: cyanide activation; copper plate; cold water rinse; acid activation; acid tin plate; cold-water rinse.

- 4. Barrel Solder Plating: acid dip; solder plate; cold-water rinse.
- 5. Hot Tin Plating: flux solution; hot tin plate; acid dip; cold-water rinse.
- 6. <u>Barrel Nickel Plating</u>: clean/rinse; acid activation; cold water rinse; nickel plate; cold water rinse (this line has a nickel reclamation stage for rinse water evaporative).
- 7. Barrel Zinc Plating: zinc plate; cold water rinse.

Rinse water from these tanks is reportedly discharged to drains underlying the tanks. Plating chemistry is reportedly pumped out into drums and transferred to waste treatment; however, spillage is captured in drains beneath these tanks. These drains (concrete sluices) discharge to sumps, which are pumped to the wastewater treatment plant. The condition of the concrete containment areas and collection sluices/sumps varied at the time of the inspection. Several lines and sumps appeared to be underlain by a composite liner over the concrete. Other lines did not have this composite liner over the concrete. The floor of the plating room was reportedly refinished in approximately 2001, and appeared in relatively good condition during the site inspection. A former wastewater collection sump was reportedly filled in and covered with concrete at this time (reportedly 10 feet deep, 15 feet in diameter). The condition of this sump prior to closure is unknown.

The wastewater treatment plant generally handles three (3) waste streams: oily rinse waters; general rinse waters; and cyanide rinses. The treatment process is conducted in a series of above ground process tanks generally ranging from 300 to 500 gallons in capacity. Treatment chemicals are received and stored in 55-gallon drums; although certain solutions (sodium hypochlorite, caustic soda) are diluted with water and stored in tanks in this area. The waste treatment area is contained by floor drains that discharge back to headworks.

The oily wastewater is treated with a flocculent that breaks the oil encapsulation of metallic wastes. This wastewater is then combined with the general metallic rinse waters. The cyanide wastewater is treated with sodium hypochlorite and caustic soda solutions to destroy cyanides. These general metallic and cyanide waste streams are then combined and proceed through the following treatment steps:

pH is raised by caustic soda addition to precipitate metal hydroxides;

- the wastewater is treated again with a flocculent and a polymer agent to remove more metals from solution;
- precipitates are settled out in a clarifier tank;
- the wastewater passes through a cationic exchange system to remove more metal ions; and
- effluent is discharged to the sewer after final pH adjustment.

Metal hydroxide sludge is removed from the clarifier, dewatered in a filter press, placed in bags and disposed as hazardous waste (F006).

Information regarding production and chemical usage was obtained from the 2001 Toxic Release Inventory Report (TRI Form R) completed for the facility. The facility "Otherwise Used" approximately 27 tons of trichloroethylene and 5 tons of methylene chloride in the year 2001.

3.3.2 Discontinued Operations

The facility has operated at the current location since approximately 1942 and operations have evolved over time. However, plating and parts cleaning were reportedly associated with the operation since its inception. The facility reportedly historically conducted solder reflow operations utilizing lead-tin solder. It could not be determined when this operation was discontinued.

3.4 CHEMICAL USE AND STORAGE

Chemical use at the facility relates primarily to maintenance operations and production support. The vast majority of chemicals are stored in 55-gallon drums or smaller containers.

3.4.1 Container Storage

Chemical use at the facility relates primarily to maintenance operations and production support as outlined below:

- Plating chemicals are delivered and stored in 55-gallon drums or smaller containers. These chemicals are stored near their point of use in the plating room or in the wastewater treatment plant. Both of these areas are contained by drains that discharge to wastewater treatment.
- Lubricants used in the machine hydraulics and as cutting oils/coolants
 are generally stored in the Press Room and End Cap Leads areas on
 secondary containment pallets. Recycled cutting oils/coolants are also
 stored in two (2) 500-gallon above ground storage tanks within a
 concrete secondary containment dike inside the building. There were
 numerous drums of waste coolant waiting recycling observed in this
 area.
- Solvents (trichloroethylene and methylene chloride) are stored in various degreasers at the facility, and in 55-gallon drums. These materials were not provided with secondary containment.
- Hazardous waste sludge (F006) is stored in bags within the wastewater treatment plant. These bags are specially designed to contain this type of waste and are commonly used in industry for this purpose. This area is contained by drains that discharge to wastewater treatment. Hazardous waste solvents (F001) are stored in drums near a shipping area adjacent to the maintenance department. There was no waste solvent present in this area during the site inspection.
- Maintenance chemicals (e.g.,) are stored in 55-gallon drums in the maintenance area;
- Fuel oil for the boilers is stored in two (2) 5,000-gallon above ground storage tanks. These tanks are installed within a concrete containment vault.

3.4.2 Underground Storage Tanks

According to facility personnel, no USTs are currently in use at the Subject Property. ERM did not observe indicators of USTs such as fill or vent pipes during the site visit. However, six (6) underground tank systems were closed in place at the facility in 1996 according to a a document entitled, Closure Report - Underground Storage Tank Systems (Kalogeras and Grosser, February 1996). Two (2) of these underground storage tanks (USTs) contained water storage (8,000 gallons each) for process water collected from two (2) former process groundwater wells at the facility.

The remaining four (4) USTs contained No. 4 fuel oil (two 3,000 gallon USTs, and two 5,000 gallon USTs). These tanks were reportedly tested and found to be tight. They were then filled with a concrete slurry mix and closed in place. There was no subsurface sampling conducted to verify conditions as part of the UST closure. The report was reportedly submitted to the New York State Department of Environmental Conservation (NYSDEC) for review. There was no record on any response from the NYSDEC regarding this report.

3.4.3 Above Ground Tanks

The facility maintains two (2) 500-gallon above ground polyethylene storage tanks for storage of recycled cutting oil. These tanks are installed within a secondary containment dike inside the building. There are also two (2) steel above ground No. 4 fuel oil storage tanks installed in 1994 within a secondary containment dike at the facility for building heating purposes. These fuel oil tanks are registered with the Westchester County Department of Health (Registration 3012544). There are polyethylene storage tanks in the wastewater treatment plant ranging in size from 300 gallons to 500 gallons for polymer, flocculent, caustic soda, sulfuric acid, and bleach. These tanks are installed over a concrete floor surrounded by drains that discharge to the treatment system headworks.

There are numerous above ground process tanks at the facility. Polyethylene tanks associated with the seven (7) plating lines at the facility range from 250 gallons to 500 gallons in size, and are installed over concrete secondary containment berms with drains that discharge to the wastewater treatment system. There are approximately 14 process tanks that comprise the wastewater treatment system installed over a concrete floor surrounded by drains that discharge to the treatment system headworks.

3.5 HAZARDOUS AND NON-HAZARDOUS WASTE MANAGEMENT...

3.5.1 Hazardous Waste

The facility is a large quantity generator of hazardous waste (USEPA ID No. NYD085502243). Approximately 100,000 pounds of hazardous waste were generated in 2001. The primary hazardous wastes generated at the

facility are metal hydroxide sludge (F006) from treatment of plating wastewater transported off-site for metals recovery, and spent solvents (F001) sent off site for solvents recovery. Approximately 44 tons of F006 sludge, and 6 tons of F001 solvent waste were sent off site in 2001.

F006 sludge is dewatered in a filter press and stored in specially designed bags in the wastewater treatment plant for disposal. The water from dewatering is fed back to the treatment plant headworks. The sludge storage area is contained by floor drains that discharge back to the treatment plant headworks. The sludge is shipped to World Resources Corporation (PAD981038227) in Pottsville, Pennsylvania by St. Joseph Motor Lines (PAD987358587).

Waste solvent is stored in a shipping area near the maintenance department in 55-gallon drums. There was no waste stored there during the site inspection. The waste is shipped to Marisol (NJD002454544) located in Middlesex, New Jersey. Marisol also provides the trucking of this material.

The facility is generally inspected on an annual basis by the Westchester County Department of Health. According to facility personnel, the facility was inspected in approximately June 2002 jointly by the Westchester County Department of Health and United States Environmental Protection Agency (USEPA) and no violations were noted.

3.5.2 Non-Hazardous Waste

Non-hazardous solid waste is generated at the subject property. Solid waste and wood are stored inside the loading dock of the building in two (2) roll-off containers. A compactor is used to maximize the amount of solid waste in the container. The solid wastes are removed regularly by Waste Management. Scrap metal is accumulated in a separate roll-off container and removed for recycling by either Lonny Joe, Inc., Pascat, Inc., Glantz Recycling, or Relvan, Inc. depending on price and market conditions. Technique, Inc. recycles silver. Waste lubricants are removed by Elf Lubricants.

WATER, WASTEWATER AND STORM WATER

3.6.1 Water

3.6

The facility is connected to the public water system for potable and process water. According to facility personnel, there are no drinking water wells at facility.

No drinking water supply wells or groundwater monitoring wells were observed on the subject property. However, there were reportedly two (2) former process water wells used at the facility. One of these wells was reportedly taken off-line in approximately 1990, and the second well in approximately 1994. The casings for these wells still exist within the building, but the pumps have reportedly been removed and the casings capped. There was no other information regarding these wells available during this assessment.

3.6.2 Wastewater

The facility generates process wastewater from plating and parts tumbling (cleaning with detergent and abrasive media). The plating room and parts tumbling areas are equipped with floor drains and sluices/sumps that are pumped to the on-site wastewater treatment plant that discharges to the sanitary sewer system after treatment.

The facility maintains a wastewater discharge permit with the Westchester County Department of Environmental Facilities (permit #5449) and is authorized to treated plating wastewater. Wastewater is discharged to the Yonkers Joint Wastewater Treatment Plant and sampling of the discharge is required quarterly by the permit. According to facility personnel, the facility is in substantial compliance with permit conditions contained in the permit.

Facility personnel reported that the property has been connected to the public sewer system for its known history, and that there are no known septic systems on the property. ERM noted no obvious visual evidence of septic systems at the facility.

3.6.3 Stormwater

The vast majority of the site is paved or covered by the building footprint. Precipitation that falls on the Subject Property is collected in a number of storm drains or leaves the property as sheet flow and is collected by storm drains located in the surrounding streets. Yonkers is served by a combined sewer system where storm water is treated with sanitary wastewater at the Yonkers Joint Wastewater Treatment Plant. There were no significant materials stored outside exposed to storm water observed during this assessment.

3.7 AIR EMISSIONS

The facility is a major source of air pollutants under the Clean Air Act, and holds a Title V Operating Permit (#3-5518-00242/00019) issued by the NYSDEC. The permit is effective 23 October 2000 through 23 October 2005. The facility is a major source for volatile organic compounds and hazardous air pollutants including cyanide, trichloroethylene, and methylene chloride. In addition, the Westchester County Department of Health has issued Certificates to Operate for various emission sources at the facility including the three (3) boilers (3.2 million BTU/Hour each), two (2) vapor degreasers, a heat treat oven, the plating lines and nickel recovery unit.

The facility was reportedly most recently inspected by the Westchester County Department of Health and USEPA in 2002, and no violations were noted.

3.8 POLYCHLORINATED BIPHENYLS (PCBS)

ERM inspected the property for types of equipment that have been historically associated with the use of PCBs as a dielectric fluid coolant and stabilizer.

There were no transformers observed on the Subject Property, and facility personnel indicated that there are no transformers owned by the facility. It is likely that Consolidated Edison maintains transformers within vaults in the street in this area.

According to facility personnel, the facility never utilized hydraulic oil containing PCBs in any equipment. The potential for the use of PCBs in

grinding and cutting oils during past site operations is low, and facility personnel were unaware of any such use.

Fluorescent lights are present in facility buildings. Based on the age of the buildings, it is possible that some of the light ballasts contain PCBs. Although disposal of fluorescent light ballasts is not regulated, best management practice would suggest that fluorescent light ballasts removed in bulk during remodeling or demolition be disposed of properly at a permitted facility.

3.9 VISUAL INDICATIONS OF ON-SITE CONTAMINATION

No visual indications of on-site contamination such as staining or stressed vegetation were observed by ERM in the exterior of the building.

However, flooring within several interior production areas of the building exhibited staining associated with the long industrial history of the property. These areas include:

- Plating room floor and containment areas;
- Wastewater treatment area;
- Press Room floor around the presses;
- Old vapor degreaser pit; and
- Cutting oil/coolant recycling area and secondary containment dike.

3.10 ASBESTOS-CONTAINING MATERIALS

A Phase I assessment, as defined by the ASTM Standard is not intended to be a formal survey for asbestos containing materials. These areas are beyond the scope of a Phase I as it is defined by ASTM Standard E 1527-2000. However, information readily available during the site inspection regarding ACM is discussed below.

Asbestos was banned in most friable building materials (sprayed applied surfacing materials and thermal system insulation) in 1978, but the Occupational Safety and Health Administration deems spray applied surfacing materials, thermal system insulation materials, and vinyl flooring materials as "presumed asbestos-containing materials" (PACMs)

if they are present in pre-1980 buildings (Title 29 of the Code of Federal Regulations, Parts 1910.1001 and 1926.1101). Historical records indicate that the site building was constructed prior to 1980, and therefore the PACMs may have been used in building construction.

An informal survey (handwritten report) appears to have been conducted in 1988 by DuAll, Inc. This survey identified ACM in the facility bake oven, old boilers, and piping in the compressor room. Asbestos air monitoring in 1995 by Rapid Environmental Management found levels below applicable standards in all areas of the facility except the old boiler room. Subsequent abatements in 1995 by Environcom, Inc. reportedly removed or encapsulated all identified asbestos at the facility, except for the old boiler room in the basement. This room has been sealed off to prevent access and exposure.

A visual inspection of potential asbestos-containing materials in easily accessible areas was conducted. No samples were collected or analyzed. ERM did not observe potential friable or non-friable PACMs on the subject property.

Under OSHA regulations building and/or facility owners are required to identify the presence, location, and quantity of ACMs in structures built prior to 1981 if construction, alteration, repair, maintenance, renovation, or custodial activities are performed. Building and/or facility owners are required to communicate the presence, location, and quantity of PACMs to facility employees or subcontractors and/or building tenants.

3.11 WETLANDS

There are no mapped wetlands are present on the subject property. No evidence of wetland areas were noted during the site inspection.

3.12 LEAD-CONTAINING MATERIALS

A Phase I assessment, as defined by the ASTM Standard is not intended to be a formal survey for lead-based paint. These areas are beyond the scope of a Phase I as it is defined by ASTM Standard E 1527-2000. However, information regarding the use of lead-containing materials available during the site inspection is discussed below.

Lead-containing materials are limited to some solder used at the facility and lead contained in metal alloys. The TRI Report for 2001 indicated 191 pounds of lead manufactured or processed at the facility during 2001.

There was reportedly a wave solder operation that used lead solder employed at the facility in the past. It is unknown how long this operation was conducted or when it was discontinued.

3.13 RADIOACTIVE SOURCES AND RADON

There were no current or former radioactive sources identified at the facility during this assessment.

A radon gas survey was not conducted during this assessment. However, information supplied by Environmental Data Resources that was obtained from the U.S. Environmental Protection Agency (USEPA), indicates that the Subject Property is located in Zone 3, where the predicted average indoor radon level is typically less than 2 (pCi/L) picocuries per liter. In addition, radon information from the New York Basement Screening Results Database for Yonkers, New York indicates average radon concentrations of 2.1 pCi/L. Radon mitigation measures are recommended by the USEPA when concentrations of radon exceed 4 pCi/L. Site-specific sampling has not been performed to evaluate the concentrations of radon within the building at the Site.

Radon is a colorless, odorless gas that exists naturally in some geologic formations. Radon levels are generally highest in basements and ground-floor rooms in contact with the earth. Building products, especially cinder blocks made from material high in uranium and other alpha-emitting radionuclides, may release radon gas.

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4.1 GENERAL INFORMATION

Based on interviews with site personnel and a review of historical records, the property was owned by the John Wanamaker Department Store and used as a warehouse from approximately 1930 through 1942. The subject property was vacant land until the building was constructed in 1930. The site was acquired by Stewart Stamping Corporation in approximately 1942 and current operations (or similar) were established. Stewart Stamping Corporation was owned by the Stewart, Lessing, Hornel and Sternfeld families at that time, who operated a facility located in the Bronx, New York from 1936 until the current site was acquired in 1942. Insilco Corporation reportedly acquired Stewart Stamping in 1968.

4.2 PREVIOUS ENVIRONMENTAL REPORTS

Site personnel indicated that no environmental investigation of the subject property have been completed in the past. An exception is the Underground Storage Tank System Closure Report conducted in 1996; however, no soil or groundwater investigation was conducted as part of these activities.

4.3 EVALUATION OF HISTORIC INFORMATION SOURCES

To determine past uses of the subject property and surrounding properties, ERM reviewed historical sources of information as outlined below. Copies of the Sanborn maps and aerial photographs are presented in Appendix B.

According to facility personnel, the site has been continuously operated for manufacturing metal products since 1942. Prior to 1942 the site was used as a warehouse from its development on undeveloped land in 1930. Information from Sanborn Fire Insurance Maps appears to substantiate this history. Maps from 1917 depict the Subject property as undeveloped land. Maps from 1942 depict the Subject Property as a John Wanamaker Department Store. There is a single building visible along Central Park Avenue on the corner of Whittier Avenue on this map, with a parking area extending towards the east of the structure. The area along Central

Park Avenue towards Kettel Street is undeveloped. Residences are present towards the east. Maps from 1950 depict the site as the Stewart Stamping Facility, and show essentially the same building layout as the 1942 maps. There is a store and a gasoline filling station adjacent to the south of the structure towards Kettel Street on these maps. Maps from 1956 depict the same building footprint; however, the store and filling station to the south are no longer present.

Maps from 1962 show that an area of the building towards Kettel Street has been developed as iron storage. Maps from 1971 and 1979 depict the entire area from Kettel Street north to Whittier Avenue as covered by the building footprint. The building extends east to a parking lot at the property boundary along Whittier Avenue. There are residences present east of the facility along Kettel Street. Maps from 1988 depict a parking area east of several residences along Kettel Street. Maps from 1991 depict the facility essentially as it is today, with the building extending east along Whittier Avenue to the property line, and extending east along Kettel Street to surround a single residence.

(INSERT AERIAL DISCUSSION WHEN AVAILABLE)

Other than the presence of a "filling station" at Kettel Street and Central Park Avenue in the 1950 maps, the Sanborn maps reviewed by ERM did not give any indication that underground storage tanks (USTs) or other fuel sources were present at the site.

5.1 ENVIRONMENTAL DATABASE SEARCH

ERM contracted EDR to conduct a database search for agency records. The report, presented in Appendix A, defines and summarizes the ASTM databases reviewed in the EDR report and notes if any sites (including the subject property) were identified in the specified radius.

Sites identified within the study radii were evaluated to determine if they are likely to have adversely impacted the subject property. The criteria used to evaluate the potential for adverse impact to the subject property include:

- · distance from the subject property,
- expected depth and direction of ground water and surface water flow,
- expected storm water flow direction, and
- the presence/absence of documented contaminant releases at the identified sites that have not been remedied to the satisfaction of regulators.

The identification of a site as potentially upgradient or downgradient is based on the expected direction of ground water flow to the south-southeast.

5.2.1 Subject Property

The facility was identified on the RCRA Large Quantity Generator (LQG), UST, AST and Spills databases. The facility generates RCRA F001 and F006 wastes. RCRA violations were reported based on an inspection in 1988, and the enforcement action listed as "Written Informal".

Information on the UST database states that seven (7) USTs were "closed-removed". There were no dates provided. This is a discrepancy with the 1996 Underground Storage Tank System Closure Report reviewed during the assessment. The database lists an additional 3,000-gallon fuel oil UST as closed at the facility.

A spill to the sanitary sewer system was reported at the Subject Property in August 1996. An area resident reportedly observed a facility employee dump lubricating oil into a storm drain at the facility. No further information was provided.

Information on the AST database indicates that there are two (2) 5,000-gallon fuel oil storage tanks registered at the facility. This is consistent with the observations made at the facility as part of this assessment.

5.2.2 Surrounding Properties

No properties were identified within the specified search radii in EDR's search of the National Priorities List (NPL), Comprehensive Environmental Recovery and Compensation Liability Information System (CERCLIS), CERCLIS No Further Remedial Action Planned, and RCRA Transporter, Storage or Disposal Facilities databases. Sites identified in EDR's review of other databases are summarized in Table 1.

Table 1 - Surrounding Area Sites Identified in EDR Report

Database	Radius searched	Sites Found
Inactive Hazardous Waste Disposal Sites (SHWS) State's equivalent to CERCLIS	1 mile	1
Resource Conservation and Recovery Information System (RCRIS) Generators Facilities which are regulated based on current hazardous waste generation management activities.	0.25 mile	5
Underground Storage Tanks (USTs)/Aboveground Storage Tanks (ASTs) List of sites that have notified the Westchester Department of Health of the presence of USTs at their property	0.25 mile	7
NY Spills Spills reported to NYSDEC	0.125 Mile	2
Chemical Bulk Storage Above Ground Tanks Registered Hazardous Substance Storage Tanks	0.125 Mile	3

Database	Radius searched	Sites Found
Leaking Underground Storage Tanks (LUSTs)	0.250 mile	1
List of closed or unremediated reported leaking underground storage		
tanks.		

Based on ERMs review of the database findings for vicinity sites, an adverse impact to the subject property from the vicinity sites is not expected with one exception. The noted exception is the Getty Service Station site located at 757 Central Park Avenue, approximately 830 feet north-northeast of the Subject Property. Underground gasoline storage tanks apparently failed a tightness test in 1999, and remediation is currently underway. This site is potentially upgradient, and groundwater impacts (if any) could reasonably affect the Subject Property. No impact is expected from the remainder of the listings in the database because the identified vicinity sites are in expected down- or cross-gradient locations, the sites have been remedied to the satisfaction of regulators, or no releases to the subsurface have been reported.

DRAFT QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL CONDUCTING THIS ASSESSMENT

This assessment was conducted by Matt Gallo, CPEA of ERM's Melville, New York office. Michael B. Teetsel, C.P.G. reviewed the contents of this report. The professional qualifications for these individuals are included in Appendix C.

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