ECRA SAMPLING REPORT AND PHASE II SAMPLING PLAN

ATOCHEM NORTH AMERICA (FORMERLY PENNWALT CORPORATION) FORMER WALLACE AND TIERNAN DIVISION 25 AND 67 MAIN STREET BELLEVILLE, NEW JERSEY ECRA CASE NO. 89150

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1.0 PROJECT DESCRIPTION

1.1 Introduction

Langan Environmental Services, Inc. (LESI) has prepared this report which summarizes the results of the sampling plan implementation at the Wallace & Tiernan facility located in Belleville, New Jersey. The facility includes the manufacturing plant located at 25 Main Street and a former service station located at 67 Main Street. The facility also included a separate parking lot located at 2120-2156 McCarter Highway, Newark, New Jersey which was not part of this investigation. This sampling plan was submitted to the New Jersey Department of Environmental Protection (NJDEP) on 10 July and resubmitted 29 September 1989, and an addendum was submitted on 8 March 1990. The sampling plan and addendum were approved on 30 May 1990.

The ownership of this property was transferred to Wallace & Tiernan because Wallace & Tiernan became a separate company from the former Pennwalt Corporation. The corporate separation has triggered the New Jersey Department of Environmental Protection's (NJDEP) Environmental Cleanup Responsibility Act (ECRA) process. The ECRA case number for the Belleville facility is 89150. The parking lot (2120-2156 McCarter Highway) was assigned a separate ECRA case number (89148) and the results of the completed site investigation there were submitted in a sampling report dated 29 June 1990.

1.2 Objective and Scope

The objective of the soil sampling investigation was to evaluate the soil quality of areas of potential environmental concern at the Belleville property in a manner consistent with the NJDEP requirements under ECRA (NJDEP Remedial Investigation Guide, March 1990).

Prior to the proposed sampling plan implementation, Wallace & Tiernan (present owner) and Atochem North America (former owner) decided to remove a number of underground storage tanks from service through excavation or in-place abandonment. As a result, the scope of the sampling plan was modified to include post-excavation sampling for excavated tanks instead of the boring program originally proposed. During implementation of the tank removals and remaining boring program, additional modifications were made in order to investigate actual field conditions.

The scope of services provided by LESI as outlined in the sampling plan, addendum, and approval letter included the following:

25 Main Street

- the two gasoline underground storage tanks were removed, and post-excavation samples were collected;
- the gasoline suction piping was investigated by collecting and analyzing soil samples from five soil borings;
- the 2,000 gallon heating oil underground storage tank was abandoned in place with Petrofill foam;
- the above-referenced tank and two 20,000 gallon heating oil underground storage tanks were investigated by collecting and analyzing soil samples from 9 test borings;
- the drum storage pad in the north yard was investigated by collecting and analyzing soil samples from storm drains and beneath the asphalt pavement;
- the warehouse loading bay was investigated to address previous spills by collecting and analyzing one soil sample from the unpaved area;
- soil samples were collected to address background conditions;
- the leaking machinery inside Building 7 was repaired, the stained soil adjacent to the building was removed, and post-excavation soil samples were collected;
- the oily discharge in Area 206 was ceased, and stained soil was removed;
- the condensate drains were investigated by collecting and analyzing one soil sample from the unpaved area directly beneath the drain;
- the floor drains in Building 7 were sealed with concrete (work by others);
- the accumulated sediment overlying the concrete pavement beneath the compressor blow-down was removed;
- the pipes in the southern corner of the plating area, which were previously connected to a sink and toilet, were plugged (work by others);

- the sediment in the storm drain, located north of Building 4, was sampled, and the integrity of the catch basin was inspected;
- sediment was removed from all elevator shaft pits, and the integrity of the pits was verified by inspection;
- the deburring trench was cleaned and the integrity of the trench was verified by inspection;
- the sediment was removed from the steam line pits, and the integrity of the pits was verified by inspection;
- an asbestos survey was conducted of all buildings at the 25 Main Street property;

67 Main Street

- the hydraulic lift was investigated to evaluate structural integrity;
- the pit inside the garage was cleaned out, and the integrity was verified by inspection;
- the compressor blow-down was rerouted to preclude exterior discharge (by others); and stained soil was removed;
- the function and discharge location of the boiler pipe was determined, and stained soil was removed;
- the six tank vents were excavated to determine their location and source;
- the No. 2 fuel oil underground storage tank was removed, and post-excavation soil samples were collected;
- the area of the former gasoline underground storage tanks was investigated by collecting and analyzing soil samples from ten soil borings;
- an asbestos survey was conducted of the interior of the garage.

In addition, based on field observations, the following were performed:

- Four additional borings were located in the Boiler Room Tank Farm Area to attempt to delineate soil contamination found there.
- An additional unknown tank was discovered in the tank farm area, the contents of this tank were subsequently pumped out.
- A 550 gallon underground storage tank was encountered during excavation of the tank vents at the 67 Main Street site. This tank was removed and tank contents and post-excavation samples were collected.
- Four additional soil borings were constructed and samples collected, as a result of finding that four gasoline tanks had formerly been located at the 67 Main Street site.
- Contaminated soils from Building 7, Compressor Blow-down and Boiler Drum Areas were excavated, staged, sampled for waste classification and subsequently disposed.

1.3 Historical Site Information

The facility at 25 Main Street was purchased by Wallace & Tiernan in 1918 and since that time has been used to manufacture chlorinators, pressure instruments, flow meters, dry chemical feed systems and cathodic protection systems. For the manufacture of these products, a variety of industrial operations are performed on site, including: milling and lathing in the machine shop, plastic molding, plating, heat treating, painting, assembly, testing and packaging.

A recently discovered (September 1990) internal Wallace & Tiernan memo dated December 22, 1972 (Appendix A) indicates a previous 20,000 gallon fuel oil tank was found to have leaked. This tank was replaced with the present tanks (#3 and 4) located in the Boiler Room Tank Farm Area (see 3.2.3 for details).

The property at 67 Main Street, the site of a former gasoline service station located adjacent to the northeast corner of the facility, was purchased by Wallace & Tiernan in 1964. This building has been used by Wallace & Tiernan for storage of snow removal

equipment. The former gasoline tanks were removed by Exxon in 1964 prior to the sale of this parcel.

For more detailed information concerning the history and operations of Wallace & Tiernan, see the Site Evaluation Submission (SES) for this facility.

2.0 ENVIRONMENTAL SETTING

2.1 Site Conditions

The manufacturing facility is located in an industrial section of Belleville, New Jersey in the northeast portion of Essex County as shown in Figure 1. Residential neighborhoods are found to the north and west of the facility. The facility lies immediately west of the Passaic River, just north of the Newark-Belleville boundary.

The average elevation in the site area is 20 feet above sea level (1927 North American Datum from USGS Orange, New Jersey, 7½ minute quadrangle). The site is relatively level, sloping very slightly toward the Passaic River. Surface water runoff is diverted via storm drains to the storm sewer system which discharges to the Passaic River.

The site is located in an area that has been industrialized for the past 100 years. Surficial soils in the vicinity of the site may have been impacted by several activities known to have occurred, including the following:

- The boiler for the Wallace & Tiernan plant, currently oil fired, was formerly coal fired. Coal storage reportedly was in the vicinity of Building 7. The change in fuels occurred during the 1940's and Building 7 was subsequently constructed in 1968.

- The parking lot at the Wallace & Tiernan plant is a section of former Route 21, which was relocated toward the Passaic River in the mid 1960's. Thus, it is expected that there may be conditions in this parking area which are typical of heavily travelled roadways in urban areas, not conditions expected to be associated with activities of the Wallace & Tiernan plant.

2.2 Subsurface Conditions

The property is generally underlain by fill materials and stratified glacial deposits of sand and gravel (USGS, 1957 and Rogers et al, 1951). According to the literature, the depth to bedrock in the site area is greater than 20 feet. The bedrock underlying the site is the Passaic Formation of the Newark Supergroup. The Passaic Formation generally consists of gray, red to red-brown shale, siltstone and sandstone units.

Test boring logs from the LESI subsurface investigation between 11-18 June 1990 are presented in Appendix B. Bedrock was not encountered in any of the test borings.

2.2.1 Fill Materials

Fill material underlies the site. The fill generally consists of red-brown, fine to medium sand with trace silt and trace gravel. The thickness of the fill ranges from six to twelve feet.

2.2.2 Unconsolidated Deposits

Underlying the fill material is red brown, fine to coarse sand with trace silt and trace fine to medium gravel.

2.2.3 Ground Water

Ground water is expected to occur under water table conditions in the unconsolidated deposits. During the test boring investigation, shallow ground water was generally encountered at depths of six feet below grade at 67 Main Street and at depths ranging from eight to twelve feet below grade in the elevated loading dock area at 25 Main Street.

Shallow ground water flow in the immediate site vicinity is expected to be generally toward the Passaic River to the southeast. This is based on our review of site topographic maps. It should be noted that ground water measurements reported at a nearby site, under investigation by the NJDEP Underground Storage Tank program, have indicated ground water flow that varies from toward the west to toward the south. Additional ground water flow measurements are required to confirm the ground water flow direction at the site. Shallow ground water is

expected to be brackish based on historic reports of a nearby former production well and to be tidally influenced.

3.0 ENVIRONMENTAL SAMPLING AND REMEDIATION PROGRAM

3.1 Sampling Plan Design

The sampling plan dated 10 July 1989 and refiled 29 September 1989 was designed to evaluate the identified areas of potential environmental concern in accordance with the NJDEP ECRA Draft Sampling Plan Guide. To help establish background conditions, two borings were planned in facility areas that had not been used for industrial activities.

On 9 February 1990, NJDEP issued a letter summarizing its inspection results. LESI addressed the concerns of NJDEP and incorporated these comments into a sampling plan addendum dated 8 March 1990.

On 30 May 1990, NJDEP issued an approval letter listing the conditions of approval and updating the original sampling plan to comply with the Remedial Investigation Guide (March 1990), which was published after the original plan was written.

The sampling plan was implemented and included all of the NJDEP approval conditions in addition to the modifications required by the tank excavation program and field observations previously described.

3.1.1 Soil Sampling Procedures

All sampling devices (stainless steel spatulas, hand augers, split spoons, shovels) were properly decontaminated according to NJDEP guidelines prior to use. This included a thorough soapy water wash to remove all solid residues. The wash was followed by successive rinses of distilled/deionized water, nitric acid, distilled/deionized water, acetone and a final distilled/deionized water rinse. The sampling devices were allowed to air dry prior to and after the acetone rinse.

Collected soil samples were placed in 8 oz. glass jars and/or 40 ml glass vials with teflon lined caps. All the sample jars and vials were supplied by Nytest Environmental, Inc. (NEI) of Port Washington, New York. Each soil sample was numbered and recorded in a field log book. Samples were stored at a temperature of 4 degrees Celsius until they were analyzed by NEI. Geologic logs describing

the soil according to the Unified Soil Classification System were prepared by a LESI geologist for all test borings.

3.1.2 Underground Storage Tank Removals and Post-Excavation Sampling

LESI supervised the removal of two underground gasoline storage tanks from 25 Main Street and two underground storage tanks from 67 Main Street. A summary of the general procedures is included in this section. For more specific information, see the individual tank sections of this report.

A permit was obtained from the Belleville construction code office for fire protection prior to tank removals. A copy is included in Appendix C.

The asphalt pavement was broken, removed, and used as backfill later. Preferred Tank Services (PTS) of Ramsey, New Jersey excavated the tank overburden and segregated contaminated soil, when necessary. Any contaminated soil was staged on 6 mil. poly sheeting and covered prior to disposal. Any clean soil was staged and later used as backfill.

Remaining product, tank bottoms, and sediment were removed by Barco Systems Tank Cleaning Services of Bellemead, New Jersey or Allstate Power Vac of Linden, New Jersey. Copies of the hazardous waste manifests are included in Appendix C. The tanks were subsequently squeegee cleaned.

Gasoline tanks were ventilated and purged until safe conditions were present.

The tanks were lifted from the excavations using a backhoe and were transported off site. The tanks were removed from the site intact and disposed as scrap by Naporano Iron and Metal Company of Newark, New Jersey. Receipts for the tanks are included in Appendix C. Attached piping from the building to the foundation and/or fuel dispenser were excavated, removed, and disposed where practical.

Contaminated soils were excavated and staged in accordance with NJDEP-Bureau of Underground Storage Tank (BUST) guidelines.

The excavations were inspected by the Belleville Fire Department prior to backfill.

LESI collected post-excavation samples for analyses from the sides and ends of the excavation and along the center line, in accordance with the NJDEP Remedial Investigation Guide.

The excavations were first lined with 6 mil. polyethylene plastic sheeting, then backfilled with stockpiled soils and brought up to surface grade with certified virgin soil fill. Fill receipts are included in Appendix C.

3.1.3 Sampling Procedures Quality Assurance

Field and Trip Blanks

Field and trip blanks were prepared for each day of sampling. Trip blanks were analyzed for volatile organics plus 15 library search compounds. Field blanks were analyzed for the sampling parameters that were requested each day.

Duplicate Samples

In general, one duplicate soil sample was collected for every 20 soil samples obtained.

3.2 Sampling Plan Implementation

25 Main Street

Underground storage tank removals and abandonment, stained soil removal, soil sampling and chemical analyses were conducted at the 25 Main Street facility in Belleville. The following areas of environmental concern were investigated or remediated:

- two former gasoline underground storage tanks and associated piping;
- the boiler tank farm area;
- the drum storage pad in the north yard;
- the spill area at the warehouse loading bay;
- background areas;
- stained soil areas adjacent to Building 7 and Area 206;
- Plating room condensate drains;
- Building 7 floor drains;
- accumulated sediment beneath the compressor blow-down;

- Plating area pipes;
- Building 4 storm drain;
- elevator shafts;
- deburring trench;
- steam line pits; and
- the interiors of all buildings located at 25 Main Street were surveyed for asbestos.

3.2.1 Background Areas

In order to determine the background levels of potential contaminants in the site area, three background soil samples were collected from two locations. Boring B-33 was located in an area not associated with any on site industrial activities. The location of Boring B-34 was selected to evaluate soil quality immediately below the pavement of the former Route 21. Sample locations (B-33 and B-34) are shown on Figure 2.

Soil borings were drilled between 11-18 June 1990 by Environmental Drilling, Inc. under the supervision of LESI. Two samples were collected from B-33, and one was collected from B-34.

The sample from B-33 was analyzed for PHC and TCL+40, excluding pesticides, and priority pollutant metals. The sample from B-34 was to be analyzed for target compound list BN+15, PHC, and U.S. EPA Priority Pollutant metals; however, the laboratory analyzed the sample for different parameters.

Background sample S-20, was collected by a LESI geologist on 10 August 1990 beneath the asphalt pavement to replace B-34. The location is shown on Figure 2. The sample was analyzed for BN+15 and U.S. EPA Priority Pollutant metals.

3.2.2 Former Gasoline Underground Storage Tanks And Associated Tank Piping

Two 1,000 gallon capacity underground storage tanks (Tanks 1 and 2), which contained gasoline, were emptied and removed according to NJDEP guidelines on 1 May 1990 as summarized in section 3.1.2.

Eight post-excavation soil samples were collected from the base of the excavation as shown in Figure 2. Post-excavation soil samples were analyzed for total petroleum hydrocarbons (PHC) with a 24 hour turnaround time. The excavation

was left open and secured with fencing overnight. Because all PHC values were below the suggested NJDEP action level of 100 ppm, the excavation was lined with 6 mil. polyethylene plastic sheeting and backfilled with the stockpiled excavated soil. The excavation was brought up to grade with certified clean fill.

The post-excavation samples were also analyzed for lead and the target compound list volatile organics plus 15 library search compounds (VO+15), including xylene.

The associated tank piping, which previously connected the gasoline tanks and pumps, was drained and left in place because the pipe was located adjacent to underground high tension electrical lines. The fuel pump was removed.

Five shallow test borings were drilled adjacent to the piping, and soil samples were collected for chemical analyses. The borings were located approximately every 15 linear feet along the length of the piping as specified in the Remedial Investigation Guide (See Figure 2). The boring logs are included in Appendix B. The soil samples were analyzed for the target compound list VO+15, including xylene, lead, and PHC.

3.2.3 Boiler Tank Farm Area

The boiler tank farm consists of: two 20,000 gallon capacity heating oil underground storage tanks (Tanks 3 and 4); one 2,000 gallon capacity heating oil underground storage tank (Tank 6) and one underground storage tank (Tank 11) (contents and capacity unknown). Tank locations are shown on Figure 2. The two 20,000 gallon heating oil tanks are presently used to heat the facility. The 2,000 gallon heating oil tank was abandoned in place on 1 May 1990 with Petrofill foam. Tanks 3 and 4 are connected with a cathodic protection system and enclosed in a polyethylene liner and concrete slab. The underground tank of unknown contents and capacity was discovered on 15 June 1990 during the test boring program. Tank 11 was emptied by Allstate Power Vac Co. on 13 September 1990. A copy of the manifest is included in Appendix C.

Test borings were drilled by Environmental Drilling, Inc. of West Creek, New Jersey between 11-18 June 1990 under the supervision of a LESI geologist. Borings were drilled on the southern and eastern edges of the tank farm in accordance with the NJDEP Remedial Investigation Guide (March 1990) to evaluate the soil conditions surrounding the tanks. The test boring locations are

shown in Figure 2 and boring logs are included in Appendix B. Borings could not be drilled on the northern and western edges of the tank farm due to the presence of underground piping and utilities. Borings B-16 and B-18, located on the eastern edge of the tank, could not be completed due to concrete obstructions.

Continuous split spoon samples were taken from each boring in order to log the soils. Samples were collected from above the ground water and at the base of the tank for chemical analyses, whenever possible. Most samples were collected at depths between 10 and 13 feet below grade. The base of Tank 6 was measured to be approximately 10 feet below grade, and the bases of Tanks 3 and 4 were approximately 12 feet 3 inches below grade.

Soil samples were analyzed for PHC and target compound list base neutral compounds plus 15 library search compounds (BN+15).

During drilling operations, stained soil and petroleum odors were observed starting at depths of 8 to 10 feet below grade and increasing with depth. Stained soils were observed in B-13 from 10 to 12 feet, B-14 from 10 to 14 feet and B-15 from 10 to 14 feet. Oil saturated soils were observed in B-17 from 8 to 14 feet and in B-19 from 8 to 12 feet below grade.

During the drilling of B-12, the tank of unknown capacity and contents (Tank 11) was discovered when the top of the tank was drilled through. A sample of the oily water inside the tank was collected and analyzed for Gas Chromatography Petroleum Fingerprinting and PHC. The diameter of Tank 11 is approximately 5 feet and the top of the tank is located 3 feet below grade. Approximately 2 feet of oily water was found in the tank.

Test boring B-42 was added to the program to determine the integrity of the newly discovered tank (Tank 11). Oil saturated soils were observed in B-42 at 11.5 to 12 feet below grade. Samples from 9-10 and 10-11 feet were analyzed for TCL+40, priority pollutant metals and PHC.

Two additional borings, B-44 and B-43 were added in the presumed downgradient direction to further delineate the horizontal extent of contamination. Oil saturated soils were observed in B-43 at 8 to 10 feet and in B-44 at 9.5 to 10 feet below grade. Samples from these borings were only analyzed for PHC.

The ECRA case manager was notified of these findings.

3.2.4 Drum Storage Pad in the North Yard

The north yard is used for receiving raw materials and for hazardous waste storage. Raw materials and waste metal shavings are stored in drums on a concrete pad, which was previously the floor of the former Building 31. Hazardous waste is also stored in drums in a bermed drum storage area as shown on Figure 2.

Six soil samples were collected by LESI on 2 and 10 July 1990 in unpaved areas and beneath the asphalt pavement surrounding the drum storage areas (S4-S9). Locations were biased towards stained areas and drainage discharge points. Sample S-5 was relocated adjacent to the fence as per NJDEP instructions. Sample S-7 was moved from inside the bermed area to the unpaved area south of the drum storage pad.

Samples were collected using stainless steel hand augers and spatulas. The volatile analysis portion of the sample was obtained from 1.5 to 2.0 feet below grade and the non-volatile portion was obtained from 0.0 to 0.5 feet below grade.

Three storm drains receive runoff from the north yard as shown on Figure 2. Sediment samples were collected for analyses from each catch basin (S-1 to S-3).

All samples were analyzed for target compound list plus 40 library search compounds (TCL+40) excluding pesticides, with the priority pollutant metals and PHC. In addition methanol, 4-Methyl-2-Pentanone (MIBK) and ethyl acetate were added to the list of parameters because these compounds were components of the contents of the former lacquer thinner tank (Tank 5), which was located to the west of the north yard.

3.2.5 Spill Area at the Warehouse Loading Bay

A minor spill from a drum of Richguard-50G occurred in the loading bay at an unknown time. Other past spills in the area are evident as shown by various colored stains on the paved areas of the loading bay driveway.

One soil sample was collected by LESI on 2 July 1990 in an unpaved area. The location was biased to a drainage discharge point located adjacent to and downslope of the driveway.

The soil sample was collected using a stainless steel hand auger and spatula. The portion of the sample for volatile analyses was obtained from 1.5 to 2.0 feet below grade and the non-volatile portion was obtained from 0.0 to 0.5 feet below grade.

The sample was analyzed for TCL+40 excluding pesticides with U.S. EPA Priority Pollutant metals and PHC.

3.2.6 Building 4 - Catch Basin

The storm water catch basin, located north of Building 4 receives runoff from the loading dock area (see Figure 2). One sediment sample was collected by LESI on 2 July 1990 from the catch basin using a stainless steel hand auger and spatula. The sample was analyzed for the north yard parameters per NJDEP's instructions. This included TCL+40 excluding pesticides, priority pollutant metals and PHC, methanol, MIBK and ethyl acetate.

Per NJDEP instructions, the integrity of the catch basin was inspected. The sediment in the catch basin was removed and drummed for disposal by SDS Service Company of Branchville, New Jersey on 18 September 1990 prior to LESI's integrity inspection of the catch basin. Visual examination of the catch basin revealed a cavity in the center of the basin floor, and a seep at the seam between the floor and the eastern wall of the catch basin. Photographic documentation of the basin is included in Appendix D.

3.2.7 Plating Room Condensate Drains

Stained soil was identified beneath the condensate drains for the ventilator outside the plating room (see Figure 2). A soil sample was collected by LESI on 10 July 1990 directly beneath the condensate drain using a stainless steel hand auger and spatula.

The volatile analysis portion of the sample was obtained from 1.5 to 2.0 feet below grade and the non-volatile portion was obtained from 0 to 0.5 feet below grade.

The sample was analyzed for TCL+40 excluding pesticides with U.S. EPA Priority Pollutant metals and PHC.

3.2.8 Stained Soil Areas Adjacent to Building 7

Several areas of stained soil were observed outside Building 7. Oil from leaking machinery inside the building seeped through cracks in the wall and had stained the soil adjacent to the building outside the wall. Wallace & Tiernan, Inc. repaired the leaking machinery and thereby eliminated the source causing the stained soil. Subsequently, the stained soil bordering Building 7 was removed and stockpiled for disposal by Gangemi Excavating & Construction of Dover New Jersey under the supervision of a LESI geologist on 18 July 1990.

The horizontal and vertical extent of the excavated soil adjacent to Building 7 is shown on Figure 2. All visibly stained soils were removed. In general, soils were excavated to depths of 1 foot below grade. Three post-excavation soil samples were collected and analyzed for PHC and target compound list BN+15.

3.2.9 Stained Soil Beneath Area 206 (Building 1)

Oil had discharged from a hose connected to a vacuum pump, located on the second floor in Area 206, out the window and onto the ground surface on the west side of Building 1. All visibly stained soils in this area were removed (see Figure 2). Less than one cubic yard of soil was removed therefore, in accordance with Item No. 20 in the NJDEP sampling plan approval letter. No post-excavation sampling was conducted.

3.2.10 Other Areas

3.2.10.1 Building 7 Floor Drains

During the NJDEP inspection of 12 and 19 December 1989, all floor drains were sealed with rubber stoppers. Since the inspection all floor drains in Building 7 have been sealed with concrete.

3.2.10.2 Plating Area Pipes

The open pipes located in the southern corner of the plating area were previously connected to a sink and toilet, located in a former office area, which discharged to the sanitary sewer. These pipes were properly capped.

3.2.10.3 Accumulated Sediment Beneath the Compressor Blow-down

Compressor blow-down formerly occurred in the rear court yard between Buildings 3 and 32. The compressor was removed and the discharge ceased. The accumulated sediment, which overlies the concrete pavement beneath the compressor blow-down, was removed and drummed for disposal by SDS Service Company under the supervision of LESI on 18 September 1990. The concrete pavement was inspected and found to be in good condition, free of cracks.

3.2.10.4 Elevator Shafts

The oil leaks, located in the lobby elevator pit was repaired. Sediment was removed from all elevator shaft pits and drummed for disposal by SDS Service Company under the supervision of LESI on 18 September 1990 and the integrity of the pits were also inspected. Photographic documentation is included in Appendix D. Visual inspection of the seven elevator pits on the site revealed no visible cracks, or other signs of physical deterioration.

3.2.10.5 Deburring Trench

Several machines associated with the deburring process discharge to a floor trench. The floor trench was cleaned by SDS Service Company on 18 September 1990, and its structural integrity was inspected by LESI. Photographic documentation is included in Appendix D. Upon visual inspection, the floor trench and associated pit were found to be in good condition, free of cracks or leaks.

3.2.10.6 Steam Line Pits

The sediment was removed from the two steam line pits (located in Building 2) by SDS Service Company on 18 September 1990 under the supervision of LESI. The integrity of these pits was inspected by LESI, and photographic documentation is provided in Appendix D. All open ended pipes were sealed by Wallace & Tiernan prior to the sediment removal. The two brick and concrete pits were found to be in good condition.

3.2.11 Asbestos Survey

An asbestos survey was conducted at the 25 Main Street facility in Buildings 1, 2, 3, 4, 6, 7 and 32. The survey was performed by Delta Environmental Consultants, Inc. of Montvale, New Jersey during 25-29 June 1990. The survey was requested by NJDEP in a letter dated 9 February 1990. NJDEP requested that the presence or absence of asbestos and its friability be assessed.

A total of 205 samples were collected and 95 (including 5 duplicate samples) were analyzed for the presence of asbestos. The samples were sent to Chem-Bio Corporation of Oak Creek, Wisconsin for analyses. Laboratory analysis was performed using EPA method 600/M4-82-020 utilizing polarized light microscopy and dispersion staining techniques.

Samples were collected after being wetted with water and sealed in plastic bags. The bags were then sealed in large bags corresponding to the building number. Sampling locations are shown in Appendix E. All sampling locations were marked with blue paint and located on floor plans.

Sampled material consisted of floor covering, pipe insulation, elbow/joint pipe insulation, wall material and ceiling tiles.

<u>67 Main Street</u>

Underground storage tank removals, stained soil removal, soil sampling, and chemical analyses were conducted at the 67 Main Street facility in Belleville. The following areas of environmental concern were investigated or remediated:

- former No. 2 fuel oil underground storage tank;
- former underground storage tank-unknown contents;
- former gasoline underground storage tanks;
- compressor blow-down area;
- boiler drum area;
- garage pit;
- hydraulic lift;
- six tank vents; and
- the interior of the garage at 67 Main Street was surveyed for asbestos.

3.2.12 Former No. 2 Fuel Oil Underground Storage Tank

A 1,000-gallon capacity underground storage tank (Tank 7), which contained No. 2 fuel oil, was emptied and removed according to NJDEP guidelines on 1 May 1990 as summarized in section 3.1.2.

Five post-excavation soil samples were collected from the base of the excavation as shown in Figure 2. Post-excavation soil samples were analyzed for total petroleum hydrocarbons (PHC) with a 24 hour turnaround time. All PHC values were below the suggested NJDEP action level of 100 ppm. The excavation was lined with 6 mil. polyethylene plastic sheeting and backfilled with the stockpiled excavated soil. The excavation was brought up to grade with certified clean fill. The post-excavation samples were subsequently analyzed for BN+15.

3.2.13 Former Underground Storage Tank-Unknown Contents (Tank 10)

A 550-gallon capacity underground storage tank (Tank 10), with unknown contents, was encountered on 2 May 1990 during the tracing and removal of tank vent lines. The tank appeared to have been improperly abandoned in place. Oily water was found inside the tank and was sampled for petroleum fingerprinting. The analysis indicated that the oily water was probably No. 2 fuel oil.

On 23 May 1990, the tank was emptied and removed according to NJDEP guidelines as summarized in section 3.1.2. During the tank removal, stained soil was observed along the northern wall of the excavation and removed. All soil removed from the excavation was stockpiled on a liner and covered prior to disposal. A pea-sized hole was observed in the bottom of the eastern end of the

tank. Ground water was encountered at the bottom of the excavation, approximately 6 feet below grade.

Six post-excavation soil samples were obtained for chemical analysis from the bottom of the tank excavation as shown in Figure 2. Samples were analyzed for PHC and TCL+40 (excluding pesticides) with U.S. EPA Priority Pollutant metals.

The excavation was lined with 6 mil. polyethylene plastic sheeting and backfilled with the stockpiled asphalt pavement and certified virgin fill.

3.2.14 Former Gasoline Underground Storage Tanks

A total of six underground storage tank vents were located behind the garage at the time of the NJDEP inspection. On 2 May 1990, PTS excavated and traced the vents under the supervision of a LESI geologist.

The four tall vents were traced to the area of the former gasoline tanks and were apparently disconnected from the former tanks and abandoned in place. One of the short tank vents lead to the former 550-gallon underground storage tank described in section 3.2.12, and the other short tank vent lead to the former No. 2 fuel oil underground storage tank described in section 3.2.11.

All above grade vent pipes were cut at grade and removed and disposed of by PTS. The below ground portions of the lines could not be removed and were left in place.

In order to investigate the four former gasoline underground storage tanks, (capacities unknown) which had been removed prior to the purchase of the property by Wallace & Tiernan, ten soil borings were drilled by Environmental Drilling, Inc. on 11-18 June 1990 under the supervision of a LESI geologist. Borings were located near the edges of the former tank farm area to evaluate the environmental character of the former tank locations.

Because preliminary analytical results showed elevated PHC concentrations on the northeastern end of the former Tank 10 excavation, test borings B-21 and B-28 were located closer to this excavation than originally proposed. Test boring B-21 was located at the western end of the former tank farm and additionally corresponded to the center of the former excavation of Tank 10. Test boring B-28

was located at the northwestern end of the former tank farm and additionally corresponded to the northeast corner of the former excavation of Tank 10. The locations of borings are shown on Figure 2.

The soil samples were generally collected in the 6-inch interval above the ground water table and the interval below the soil fill material. The soil samples were analyzed for PHC, lead, and target compound list VO+15 and xylene.

3.2.15 Compressor Blow-Down Area

The compressor blow-down pipe behind the garage was rerouted by Wallace & Tiernan, as a result there is no longer an exterior discharge.

One surficial soil sample, S-11 was collected by LESI on 2 May 1990 from the area beneath the former compressor blow-down pipe. The sampling location is shown on Figure 2. Because preliminary data showed PHC concentrations above the suggested ECRA action levels, soil was removed from the area.

On 23 May 1990, the compressor blow-down area was excavated by Preferred Tank Services (PTS) under the supervision of a LESI geologist to a depth of approximately 4.5 feet. The excavated soil was stockpiled for disposal. The extent of the soil excavation is shown on Figure 2.

A post-excavation soil sample, S-14 was collected from the base of the excavation for chemical analyses. Samples S-11 and S-14 were analyzed for PHC and target compound list BN+15.

3.2.16 Boiler Drum Area

A pipe formerly exited the boiler and discharged to a point below grade. The area around the pipe was excavated to determine the function and discharge point of this pipe.

PTS excavated the area beneath the pipe under the supervision of a LESI geologist on 2 May 1990. The pipe lead to a buried "boiler drum", which consisted of a decomposed gravel filled steel drum apparently used to capture discharges from the boiler blow-down.

One soil sample, S-13 was collected from a depth of 1.5 to 2.0 feet near the base of the buried "boiler drum". The sample location is shown on Figure 2. Because preliminary results showed PHC concentrations above the suggested ECRA action levels, soil and the drum were removed from the area.

On 23 May 1990, the "boiler drum" and surrounding soil were removed and stockpiled for disposal by PTS under the supervision of a LESI geologist. The extent of the excavation is shown on Figure 2. A post-excavation sample, S-15, was collected for chemical analysis from the base of the excavation at a depth of 5.0 to 5.5 feet below grade.

Samples S-13 and S-15 were analyzed for the target compound list BN+15 and PHC.

3.2.17 Garage Pit

A pit in the floor of the garage was full of sediment during the NJDEP inspection. The sediment was removed and drummed by PTS on 2 May 1990 under the supervision of a LESI geologist. The integrity of the pit was verified by LESI to be structurally sound. Photographic documentation is included in Appendix D.

3.2.18 Hydraulic Lift

An operative hydraulic lift is located inside the garage at 67 Main Street. No pits or sumps are associated with the lift. Photographic documentation is included in Appendix D.

3.2.19 Asbestos Survey

An asbestos survey was conducted at the 67 Main Street Building No. 9 facility between 25-29 June 1990. The survey was the result of NJDEP's request to perform an asbestos survey to identify any friable asbestos-containing material. Delta Environmental Consultants, Inc. of Montvale, New Jersey performed the asbestos survey.

A total of four building material samples were collected from homogeneous materials which were suspected of containing asbestos. The samples consisted of

boiler and elbow insulation, lavatory plaster wall and storage room sheet rock plaster. The samples were sent to Chem-Bio Corporation of Oak Creek, Wisconsin for analyses. Laboratory analysis employed EPA method 600/M4-82-020 utilizing polarized light microcopy and dispersion staining techniques.

3.3 Health and Safety

Level D personal protection was sufficient for the site sampling investigation. During the sampling investigation, periodic air monitoring was co nducted with an HNU photoionization detector or OVA flame ionization detector. All sampling personnel wore rubber boots, disposable latex gloves under rubber gloves, and disposable tyvek suits over clothing.

4.0 FINDINGS AND RECOMMENDATIONS

Soil sampling and analyses were conducted for the 25 Main Street facility and the 67 Main Street site as described in the previous sections. The results of these analyses are summarized in the following sections and on Tables 1 through 12. Only parameters detected in the set of samples have been shown on the tables. Figure 3 shows sampling locations and annotated sampling results. The annotated results only include concentrations which are above the suggested ECRA Soil Action Levels - 1 part per million (ppm) for total volatile organic compounds (VO), 10 ppm for total base neutral compc nds (BN), 10 ppm for total acid extractable compounds (AE), 5 ppm for total polychlorinated biphenyls (PCB's) and 100 ppm for total petroleum hydrocarbons (PHC). Also included in these annotated results are any metals concentrations above the individual suggested ECRA action levels. All suggested ECRA action levels are indicated on each of the tables showing environmental sample analytical results. If all of the concentrations were below the suggested ECRA action levels then only the total petroleum hydrocarbon result was shown on Figure 3, as it is the most prevalent constituent of potential concern at the site.

Analytical summary sheets and non-conformance summaries are included in Appendix F. Complete laboratory analytical reports are presented in Appendix G.

4.1 25 Main Street

4.1.1 Background Samples

Three background soil borings were completed (B-33, B-34 and S-20). From these borings four samples were collected, one each from B-34 and S-20 and two from

B-33. The upper (0-0.5 feet) sample in B-33 was analyzed for BN+15, AE+10, PCB's, metals, cyanide and PHC. The lower sample (7.5 - 8 feet) in B-33 was analyzed for the above parameters and VO+15. Sample B-34 was analyzed for VO+15, PHC and lead. Sample S-20 was analyzed for BN+15 and metals. The results for these samples are shown on Table 1.

The results indicate that PHC concentrations were above the suggested ECRA action levels in all samples analyzed. The PHC concentrations were 105 ppm in the lower depth sample at B-33 (7.5-8 ft.), 236 ppm (0-0.5 ft.) at B-34 and 293 ppm in the 0-0.5 ft. sample at B-33.

None of the samples had metals concentrations above the suggested ECRA action levels.

Low levels of acetone and methylene chloride were detected in sample B-34, these were also found in the trip blank and are expected to be laboratory artifacts. The deeper sample B-33 also indicated a low level of acetone (0.042 ppm).

Levels of targeted BN compounds ranged from a total of 7.57 ppm in B-33 shallow and 3.301 ppm in S-20 to 0.942 ppm in the B-33 deep sample. Non-targeted BN levels ranged between 2 to 3 ppm. No AE compounds were detected in the samples.

The B-33 shallow sample indicated 0.38 ppm Arochlor 1016 and 0.21 ppm Arochlor 1260.

The concentration of PHC, PCBs and BN compounds in these samples must be taken into account when evaluating the data of the environmental samples.

4.1.2 Former 1,000 Gallon Underground Gasoline Storage Tanks 1 and 2 and Associated Piping

Eight post-excavation soil samples (PE-1 to PE-8) were collected from the base of the tank excavation and analyzed for Volatile Organic Compounds, plus 15 library search compounds (VO+15), xylene, lead and total petroleum hydrocarbons (PHC). Five test borings (B-8 through B-11 and B-41) were installed near the gasoline piping (previously connected to the tanks and pumps) with one sample

collected from each test boring. These samples were analyzed for VO+15, xylene, lead and PHC.

The results of the post-excavation samples are shown on Table 2. The results of the post-excavation sampling indicate that all concentrations of VO, PHC and lead were below the suggested ECRA action levels.

The samples collected from the test borings conducted along the piping had concentrations of VO and lead below the suggested ECRA action levels. A summary of the results is shown on Table 3. Concentrations for PHC ranged from 179 ppm (B-8) to 445 ppm (B-11). These samples are above the suggested ECRA action level of 100 ppm PHC for further delineation but equivalent to background level (see Section 4.1.1). Additionally VO concentrations, a leading indicator parameter for gasoline, were insignificant. In light of the above facts, no further action is recommended.

4.1.3 Boiler Tank Farm

Thirteen test borings (B-12 through B-19 and B-42 through B-44) were conducted in the area of the Boiler Tank Farm. From these borings, thirteen samples were collected and analyzed for Base/Neutral compounds plus 15 library search compounds (BN+15) and PHC. Four of the thirteen test borings (B-16A, B-16B, B-18A and B-18B) could not be completed to their final depths due to concrete obstructions. No samples were collected from these borings.

During drilling operations, stained soil and petroleum odors were observed starting at depths of 8 to 10 feet below grade and increasing with depth. Stained soils were observed in B-13 from 10 to 12 feet, B-14 from 10 to 14 feet and B-15 from 10 to 14 feet. Oil saturated soils were observed in B-17 from 8 to 14 feet and in B-19 from 8 to 12 feet below grade, B-42 had oil saturated soil at 11.5-12 feet, B-43 at 9.5-10 feet and B-44 at 9.5-10 feet below grade.

The analytical results indicate that all of the soil samples contained PHC concentrations above the suggested ECRA action level. The concentrations ranged from 336 ppm (B-42) to 52,200 ppm (B-14). The next highest PHC concentrations were 31,200 ppm (B-43) and 26,600 ppm (B-19). Two of the soil samples contained BN concentrations above the suggested ECRA action level of 10 ppm, B-14 (16.1 ppm) and B-17 (10.86 ppm). These total concentrations do not include

bis (2-ethylhexyl) phthalate which is a common laboratory contaminant and is not a component of petroleum products. The results can be found on Table 4.

Tanks 3 & 4 will be precision tested by Wallace & Tiernan before September, 1991 in accordance with NJDEP UST requirements and Tank 11 will be abandoned in place as indicated by site conditions. In addition it is recommended that additional borings and monitoring wells be installed to determine the vertical and horizontal extent of the area impacted by the historical leaks from the former fuel oil tank (Appendix A). Specific locations and analytical parameters are detailed in Section 6.4 of this report.

4.1.4 North Yard Drum Storage Area

Nine samples were collected from the North Yard Drum Storage Area. Three of these samples (S-1 through S-3) were sediments collected from catch basins and six (S-4 through S-9) were soil samples collected from shallow test borings. The samples were analyzed for VO+15, BN+15, AE+10, PHC, U.S. EPA Priority Pollutant metals and methanol, MIBK and ethyl acetate. Analytical results can be found on Table 5.

Catch Basins

The catch basin samples S-1 through S-3 contained elevated levels of metals, including cadmium (suggested action level 3 ppm) with concentrations ranging from 8.7 ppm (S-1) to 72.9 ppm (S-2). Chromium concentrations also exceeded the suggested action level of 100 ppm with levels ranging from 323 ppm (S-1) to 815 ppm in S-2. The copper suggested action level of 170 ppm was exceeded ranging from 2,320 ppm in S-1 to 4,200 ppm in S-3. The mercury suggested action level (1 ppm) was exceeded in all catch basins ranging from 4.1 ppm in S-1 to 8.1 ppm in S-3.

The nickel suggested action level of 100 ppm was exceeded in S-1 to S-3 ranging from 178 ppm (S-1) to 587 ppm in S-2. The suggested action level for silver (5 ppm) was exceeded in S-2 with a concentration of 9.5 ppm.

The zinc suggested action level of 350 ppm was exceeded in all catch basins ranging from 871 ppm in S-1 to 2,830 ppm in S-3.

The VO suggested action level of 1 ppm was exceeded in S-1 with a toluene concentration of 1.8 ppm. AE compounds were not detected. The total targeted BN suggested action level (10 ppm) was exceeded in S-3 at 74.8 ppm. The non-targeted total BN concentrations for S-1 through S-3 ranged from under 100 ppm (S-2) to over 1,000 ppm (S-3).

None of the other compounds related to the lacquer thinner tank (methanol, MIBK and ethyl acetate) were detected in catch basin sediment samples.

It is recommended that sediments be removed from all of the catch basins and be properly disposed in accordance with all local, state and federal regulations.

Soil Samples

Soil sample S-4 exceeded the PHC suggested action level with a concentration of 318 ppm. S-5 contained 375 ppm PHC and 405 ppm in the duplicate. 3.9 ppm of cadmium were detected, slightly exceeding the suggested action level of 3 ppm. S-6 exceeded the suggested action level for arsenic (20 ppm) with the concentrations of 35 ppm in the original sample and 38 ppm in the duplicate. The suggested action level for mercury (1 ppm) was also exceeded, the original sample contained 3.1 ppm, the duplicate 3.2 ppm. However in samples S-4 through S-6, VO and BN concentrations were negligible. Acid Extractable compounds were not detected.

Based on the relatively low concentrations of constituents found in S-4 through S-6, no further action is recommended for these locations.

S-7 contained elevated levels of arsenic at 182 ppm, cadmium at 7.6 ppm, 302 ppm copper (suggested action level 170 ppm), 6.2 ppm mercury and 401 ppm zinc (suggested action level 350 ppm). VO concentrations did not exceed the suggested action level. The total BN concentration exceeded the suggested action level (of 10 ppm) with 134.8 ppm, no AE were detected, PHC concentration was 1,960 ppm.

It is recommended that limited soil excavation and disposal be performed with post-excavation sampling for PHC, metals and BN+15.

S-8 contained elevated levels of PHC at 59,100 ppm. The total targeted BN concentration was 9.55 ppm of which 3.4 ppm was di-n-butyl phthalate, not associated with heating or lubricating oils. The library search indicated a total of approximately 260 ppm. No VO or AE concentrations exceeded suggested action levels.

Although S-8 revealed a PHC concentration of 59,100 ppm samples obtained within 35 feet to the east, north and south demonstrated relatively low levels of PHC and insignificant levels of BN and VOs. These data reveal that the level detected at S-8 is a localized condition. It is recommended that visibly stained soil from below the pavement be excavated. Post-excavation samples would be collected for analysis, the details will be addressed in the Phase II Sampling Plan (Section 6.1.4 of this report).

S-9 did not exceed any suggested action levels for metals or VO. The total targeted BN concentration was 15.54 ppm of which 13 ppm was bis-(2-ethylhexyl) phthalate which is expected to be a laboratory and not an environmental contaminant. The PHC concentration was 269 ppm which is the range of background levels found. No further action is recommended in this area.

4.1.5 Spill Area - Warehouse Loading Bay

One sample (S-10) was collected from an area of a former spill outside the warehouse loading bay. This sample was analyzed for PHC and Target Compound List (TCL+40) parameters excluding pesticides. The TCL+40 parameters include VO+15, BN+15, AE+10, PCBs, metals and cyanide.

The results of this sampling indicate that three metals exceeded the suggested ECRA action levels. These include antimony (10.6 ppm), arsenic (86.4 ppm) and zinc (986 ppm).

Sample S-10 did not exceed suggested ECRA action levels for Cyanide, PCB, VO or AE compounds. Suggested ECRA action levels were exceeded for PHC (348 ppm) and BN (88.26 ppm) which were predominantly composed of polycyclic aromatic hydrocarbons (PAH). The results of this sampling are shown on Table 6.

Limited soil removal and post-excavation sampling are recommended for this area, see the Phase II Sampling Plan (Section 6.1.1) for details.

4.1.6 Catch Basin - Building 4 - Loading Bay

One sample (S-17A) was collected from a catch basin outside the loading bay at Building 4. The sample was analyzed for PHC and TCL+40 compounds (excluding pesticides).

The results of this sampling indicates that seven metals exceed the suggested ECRA action levels. These metals include cadmium (13.3 ppm), chromium (127 ppm), copper (1,230 ppm), mercury (3.1 ppm), nickel (120 ppm), silver (6.6 ppm) and zinc (848 ppm).

Sample S-17A exceeded the suggested ECRA action level for VO (1.061 ppm), BN (12 ppm) and PHC (80,200 ppm). The BN concentration does not include di-n-butylphthalate (8.8 ppm) and bis (2-ethylhexyl) phthalate (50 ppm) which are common laboratory contaminants.

Concentrations of AE, PCBs and cyanide were below the suggested ECRA action level. Analytical results are summarized on Table 6.

The sediments in the catch basin were removed for disposal during the sampling plan implementation in order to verify the catch basin's structural integrity, therefore no further action is required.

4.1.7 Plating Room Condensate Drain

One sample (S-16) was collected from an area of stained soil under the plating room ventilators. This sample was analyzed for PHC and TCL+40 compounds (excluding pesticides).

This sample was elevated for all twelve metals analyzed. The sample was also elevated for BN (21.59 ppm) and PHC (13,900 ppm). The total BN concentrations do not include di-n-butylphthalate (3.7 ppm) or bis-(2-ethylhexyl)-phthalate (0.01 ppm). Concentrations of AE, VO, PCB's and cyanide were below the suggested ECRA action level. Analytical results are located on Table 6.

It is recommended that the stained soil be excavated and post-excavation samples collected and analyzed for U.S. EPA Priority Pollutant metals, PHC and BN (See Section 6.1.1).

4.1.8 Post-Excavation Samples - Building 7

Three post-excavation soil samples were taken along the eastern side of Building 7 (S-17B, S-18, S-19) subsequent to the removal of stained soil in this area. A duplicate sample of S-19 was also taken. The samples were analyzed for BN+15, and PHC.

The results of the post-excavation sampling are shown on Table 7. All of the samples were below suggested action level for BN. The PHC concentrations were 241 ppm (S-17B), 276 ppm (S-19), the duplicate sample was 291 ppm and 455 ppm (S-18). These samples are above the suggested ECRA action level for PHC for further delineation but are equivalent to background levels (see Section 4.1.1). In light of the above facts and the insignificant concentrations of BN present, no further action is recommended.

4.1.9 Asbestos Survey

Ninety-five samples collected during the survey were analyzed for asbestos containing materials (ACM). Five were duplicate samples. Fifty-one sample locations indicated the presence of ACM. The majority of the areas are in generally good condition and can remain in place while monitored under Wallace & Tiernan's ongoing Operations and Maintenance Program.

Based on their condition and damage potential three areas are recommended to have asbestos materials removed, these include the Paint Shop in Building 3, the Welding Area of Building 3 and the Boiler Room in Building 9 (See Appendix E).

4.2 67 Main Street

4.2.1 Fuel Tank Number 7

Five post-excavation soil samples (PE-9 to PE-13) were collected from the tank excavation and analyzed for BN+15 and PHC. All of the samples contained concentrations below the suggested ECRA action levels. Analytical results are summarized on Table 8.

No further action is recommended in this area.

4.2.2 Tank Number 10

Six post-excavation soil samples (PE-14 to PE-18) were collected from the tank excavation and analyzed for VO+15, BN+15 and PHC. A duplicate of PE-18 was taken at the center of the excavation.

One soil sample, PE-15 was below the suggested ECRA action level for PHC. Results for the other samples ranged from 121 ppm (PE-14) to 8,590 ppm (PE-18 duplicate). The original sample for PE-18 was 4,340 ppm. The remaining samples PE-16 and PE-17 had concentrations of 762 ppm and 855 ppm.

Sample PE-16 was the only sample above the suggested ECRA action level for BN (111 ppm). The highest individual concentrations of BN compounds were fluoranthene, pyrene and phenanthrene.

Sample PE-18 duplicate was the only sample above the suggested ECRA action level for VO (2.097 ppm). The original sample PE-18 contained 0.385 ppm of VO. The highest individual concentrations of VO were xylene, toluene and ethylbenzene.

Based on the results of the analytical testing and field observations it is recommended that additional soil removal be conducted and post-excavation samples be taken and analyzed for PHC and BN.

The extent of the proposed additional excavation and recommended post-excavation sampling and analysis are presented in the Phase II Sampling Plan (Section 6.1.4).

4.2.3 Former Gasoline Underground Storage Tanks

Ten soil borings were installed in the area of four former underground gasoline storage tanks. Twenty-one soil samples were obtained from these ten borings and analyzed for VO+15, PHC and lead.

Nineteen of the twenty-one soil samples had concentrations of PHC above the suggested ECRA action level. The two samples with concentrations below the suggested action level were both from boring B-35. One of the samples was a duplicate of the 6.0-6.5 foot sample and contained 94.7 ppm, the original 6.0-6.5

foot sample in B-35 contained 208 ppm, the second sample was taken at 8.0-8.5 feet and contained 46.1 ppm. The PHC results of the remaining borings ranged from 113 ppm (B-39, 6.0-6.5 feet) to 2,300 ppm (B-21, 7.0-7.5 feet). The deeper sample at B-21 (11.5-12.0 feet) contained 304 ppm of PHC. The two next highest samples were from B-28. The 5.5-6.0 foot sample at 1,420 ppm and the deeper sample (8.0-8.5 feet) contained 754 ppm of PHC.

No lead or VO concentrations exceeded the suggested ECRA action level. Table 9 contains the analytical results.

Based on the lack of elevated VO concentrations and the presence of PHC in background samples no further action is recommended for the central and eastern portions of this area. The western section of this area will be addressed in conjunction with the proposed additional excavation in the Tank 10 area (4.2.2 above) which overlaps this area.

4.2.4 Compressor Blow-down Area

Two soil samples (S-11 and S-14) were collected from the compressor blow-down area. Sample S-11 was collected to evaluate the spill area and S-14 was collected as a post-excavation sample.

Sample S-11 was collected from the area beneath the former compressor blow-down pipe. The sample was analyzed for PHC and BN. Sample S-11 exhibited concentrations of 7,890 ppm of PHC. The sample did not contain elevated BN concentrations. This source area was excavated.

The second sample (S-14) was a post-excavation soil sample obtained subsequent to soil removal. It was collected from the base of the excavation. The post-excavation sample contained 326 ppm of PHC and a total concentration of 32.97 ppm of base neutral compounds (BN). Of the total base neutral compounds, 32.0 ppm was bis (2-ethylhexyl phthalate) which is a common laboratory contaminant and is not a component of petroleum. Analytical results are shown on Table 10.

Based upon the relatively low concentrations of PHC and low level of PAH portion of the BN fraction of the post-excavation sample, no additional action is required for this area.

4.2.5 Boiler Drum Area

Two soil samples (S-13 and S-15) were collected from the boiler drum area. Sample S-13 was collected to evaluate the apparent "discharge" area and S-15 was collected as a post-excavation sample.

Sample S-13 was collected near the base of the buried "boiler drum." This sample was analyzed for PHC and BN+15.

The sample contained a concentration of 4,610 ppm of PHC. The sample did not contain elevated concentrations of BN compounds. This source area was excavated.

Post-excavation sample S-15 was collected from the base of the excavation after soil removal. The sample contained 136 ppm of PHC. The sample did not contain elevated concentrations of BN compounds. Analytical results are shown on Table 10.

Based upon the relatively low concentrations of PHC obtained in the post-excavation soil sample, no further action is recommended for this area.

4.2.6 Asbestos Survey

Four samples were collected in the garage building, three were analyzed to determine whether they contained asbestos. Two of the samples from the boiler room contained asbestos. Wallace & Tiernan has an ongoing ACM operations and maintenance program which covers the ACM not presently requiring abatement. Based on the condition of the materials and potential for exposure, removal is recommended for a limited area of elbow insulation (Appendix E).

4.3 Waste Characterization Analyses

Stockpiled soils and sediments were sampled and analyzed for waste classification and disposal purposes, the results are summarized in Table 12. Non-hazardous soils were transported by American Waste Services, Inc. and disposed at the American Waste Landfill in Waynesburg, Ohio.

The Tank 11 sludge residue was disposed as New Jersey hazardous waste x 723.

4.4 Quality Assurance/Quality Control Evaluation

The analytical data were supplied by Nytest Environmental, Inc. of Port Washington, New York.

Quality assurance mechanisms used to evaluate the field sampling procedures included trip and field blanks. The trip blanks were analyzed for volatile organic compounds. The field blanks were analyzed for U.S. EPA Priority Pollutant metals, base neutrals, volatile organics acid extractables, polychlorinated biphenyls, cyanide and petroleum hydrocarbons. In addition, the laboratory performed other QA/QC analyses including matrix spikes and matrix spike duplicates, surrogate spikes, method blanks and QA/QC checks such as GC/MS instrument turning and mass calibration. A laboratory deliverable check list, chronicle and non-conformance summary were also completed by the laboratory (See Appendix D).

The laboratory method blanks contained low concentrations of various volatile compounds including tetrachloroethene, methylene chloride and 2-propanone. The method blanks also contained various unknown library search compounds including unknown freons.

Some of the method blanks contained low concentrations of various base neutral compounds including di-n-butyl phthalate and bis (2-ethylhexyl) phthalate. The method blanks also contained various unknown library search compounds including unknown alkenes and other unknowns some of which were the results of Aldol condensation products.

In general, low concentrations of volatiles were detected in trip and field blanks and low concentrations of di-n-butyl phthalate and bis (2-ethylhexyl) phthalate were detected in the field blanks.

Qualifiers are used in the analytical summary tables (Tables 1 through 12) to denote concentrations that may have been affected by the QA/QC data or other analytical procedures. The qualifiers are referenced and explained at the bottom of the table.

Evaluation of the method, trip and field blank data suggest acceptable levels of laboratory contamination. Methylene chloride and 2-propanone (acetone) are common laboratory solvents used in the cleaning of laboratory instrumentation and glassware. Bis (2-ethylhexyl) phthalate and di-n-butylphthlate are common plasticizer ingredients found in flexible tubing, plastic containers and protective clothing.

5.0 CONCLUSIONS

The sampling plan and remediation program were conducted in accordance with NJDEP guidelines and the Sampling Plan approval letter stipulations. The following provides a brief summary of the findings:

- The sampling program was modified to include post-excavation sampling, rather than boring installation, at four tank locations.
- Two previously unknown tanks were discovered during this investigation, one was removed, the other is recommended to be abandoned in the future.
- Borings installed in the Boiler Room Tank Farm Area encountered oil saturated soils, this area is recommended for further action during the Phase II sampling program.
- Sediments from four catch basins all contained elevated concentrations of metals and petroleum hydrocarbons. One was already cleaned out, the other three are recommended to be cleaned out during Phase II.
- Limited soil removal was performed with post-excavation sampling where soil removal volume exceeded one cubic yard, no further action is recommended there. Some additional limited soil excavation and sampling is recommended for several additional locations (See Section 6.1).
- One of the hand auger sampling locations in the North Yard Drum Storage Area had elevated petroleum hydrocarbon concentrations, Phase II sampling is recommended here.
- Background samples indicated elevated levels of petroleum hydrocarbons to be present. This was considered in evaluating the data.
- Post-excavation and boring program sampling of the gasoline tank areas and former fuel oil tank (#7) area at 67 Main Street indicate no residual contamination, therefore no additional action is recommended.
- Limited asbestos removal is recommended in four locations. The remainder of asbestos containing materials will be monitored as part of Wallace & Tiernan's Operations and Maintenance Program.

- Removal of sediments from pits, trenches and elevator shafts were completed in addition to capping of pipes and plugging of floor drains.

- In general the site was found to be free of elevated concentrations of metals, volatile and acid extractable organic compounds.

NJDEP Issues

Additional items described in the sampling plan approval letter (dated May 30, 1990) which have not been previously addressed in this report include the following, which have been numbered as they were in the letter for ease of discussion:

Item 3 - The former lacquer thinner tank - located on the north side of Building 3 was removed by Recon Systems in 1989. The data submitted in the SES indicated the excavation to be clean. A question was raised regarding the post-excavation laboratory deliverables and possible presence of a peak indicating MIBK in one of the samples.

These issues were discussed with Recon who contacted the ECRA case manager and explained the technical issues related to non standard (GC only) analytical procedures. As a result it was agreed the previously submitted data were acceptable and no further action would be required. The letter confirming this is included in Appendix H. The ECRA case manager subsequently requested a copy of Recon's field notes. These are also included in Appendix H.

Item 29 - NJDEP described a July 14, 1989 memo by BUST which detailed a potentially leaking No. 4 fuel oil tank, which had been reported by a Wallace & Tiernan employee, to be suspected of being located under the Route 21 ramp. NJDEP requested this tank location to be identified and borings installed. Discussions with Atochem N.A. and Wallace & Tiernan representatives have not resulted in identification of the reported employee, nor substantiation of the location of any additional tanks. The other potential location of this tank identified by NJDEP as a sewer clean out is also not the suspected tank location.

As a result of additional discussions with NJDEP, it was determined that H&G Industries, located across Mill Street is presently performing an investigation under the Underground Storage Tank Program. This was the result of discovery of fuel oil contaminated soil and ground water during a 1988 tank investigation.

Langan Environmental Services, Inc. performed a review of NJDEP files for the H&G Industries project. This revealed that four monitoring wells were installed. One well (MW-1) initially

contained two feet of product which was subsequently recovered. Ground water elevations were measured on three occasions during April and May 1989. Ground water flow direction varied, during two rounds the flow was in a westerly direction, during one the flow direction was to the south. Therefore the "suspected" tank may not necessarily be the only potential source of contamination. The H&G tank which had been removed, may have been the source of contamination for well #1, which had been reported to be upgradient of the H&G tank.

In light of the discovery of petroleum contamination at the Wallace & Tiernan Boiler Room Tank Farm, monitoring wells are proposed to be installed. These will aid in determining site ground water flow direction which may clarify the H&G source area.

6.0 PHASE II SAMPLING PLAN

Based on the results of the findings of the initial sampling program described in sections 3 and 4 above, additional sampling is proposed for the Wallace & Tiernan, Belleville, New Jersey facility. In addition, limited soil excavation is recommended for several selected areas. Proposed soil excavation and sampling locations are shown on Figure 4. The proposed sampling depths and analyses are shown on Table 13.

6.1 Soil Removal and Post-Excavation Sampling

25 Main Street

6.1.1 Plating Room Condensate Drain Area

Sample S-16 indicated elevated levels of metals, BN and PHC. Surficial soils will be excavated and staged. Post-excavation sample PE-30 will be collected and analyzed for Priority Pollutant metals, TCL BN+15 and PHC.

6.1.2 Spill Area at Warehouse Loading Bay

Sample S-10 indicated elevated levels of metals, BN and PHC. Surficial soils will be excavated and a post-excavation sample, PE-31 will be analyzed for antimony, arsenic and zinc, TCL BN+15 and PHC.

6.1.3 **North Yard Drum Storage Area - S-7**

Sample S-7 indicated elevated metals, BN and PHC concentrations. Surficial soils will be excavated and post-excavation sample PE-32 collected for analysis of arsenic, cadmium, copper, mercury and zinc, TCL BN+15 and PHC.

6.1.4 **North Yard Drum Storage Area - S-8**

Sample S-8 indicated elevated PHC concentrations at a depth of 1.5-2 feet. It is proposed to excavate the area below the pavement exhibiting stained soils. Two post-excavation samples PE-36 and PE-37 will be collected from the bottom of the excavation. These samples would be analyzed for PHC.

<u>67 Main Street</u>

6.1.5 **Tank 10 Excavation**

Post-excavation and boring samples collected in the vicinity of the former Tank 10 indicated residual concentrations of BN and PHC above the suggested ECRA action levels. Additional excavation and removal of soils down to the water table and to the east of the present excavation are proposed. Post-excavation samples PE-33 through PE-35 will be collected from the sidewalls and analyzed for TCL BN+15 and PHC.

<u>25 Main Street</u>

6.2 **Catch Basins Sediment Removal**

Based on the results of initial sampling at catch basin locations S-1, S-2 and S-3 it is proposed that sediments from these catch basins be removed and disposed. The integrity of the catch basins will subsequently be inspected.

Stockpiled soils and sediments will be staged on and covered with plastic sheeting prior to disposal, waste classification samples will be collected for analysis.

6.3 Boiler Room Tank Farm Area

Based on the finding of oil saturated soils in borings installed during the initial sampling program, several actions are proposed:

6.3.1 Tank 11 Abandonment

The newly discovered Tank 11 has been emptied of its contents during the initial sampling phase. It is proposed that this tank (likely capacity 2,000 gallons) be abandoned in place. The tank can not be excavated without causing structural damage to the adjacent secondary containment for the fuel oil tanks or buildings.

6.3.2 Monitoring Well Installation and Soil Sampling

Based on the finding of oil saturated soils in depths ranging from 8 to 12 feet, it is recommended that a monitoring well (MW-1) be installed between Borings B-14 and B-15 to determine whether recoverable product is present on the water table. Monitoring wells MW-2 and MW-3 are located in the expected downgradient directions to monitor for the presence of dissolved fuel oil components.

Based on the expected ground water flow direction (east toward the Passaic River), MW-4 will be located to monitor background conditions.

Prior to installation of these monitoring wells, split spoons will be advanced to the water table and continuous samples obtained. Soil samples will be collected for analysis from the 6" interval just above the water table and a selected 6" interval in the unsaturated zone above the capillary fringe. Actual sampling depths will be determined in the field based on observations. Soil samples will be analyzed for BN+15 and PHC.

Monitoring wells would be installed by a NJ licensed well driller in accordance with the NJDEP monitoring well specifications. The well locations would be surveyed for horizontal and vertical control by a licensed surveyor. Water level measurements will be collected monthly for the first six months after well installation.

One round of sampling would be performed no earlier than two weeks after completion of installation. Analyses would include VO+15 and xylene, BN+15 and PHC.

Field and Trip Blanks will be collected for each sampling event. The field blank would be analyzed for the same parameters as the environmental samples, the trip blank only for VO (if analyzed).

6.4 Asbestos Abatement

The results of the asbestos survey indicated four areas requiring asbestos abatement. These areas will be addressed during the implementation of Phase II.

At 25 Main Street the Paint Shop in Building 3, the Welding Area of Building 3 and the Boiler Room in Building 9 will have asbestos removed. At 67 Main Street asbestos material will be removed from the boiler room as indicated in Appendix E.

6.5 Reporting and Schedule

At the conclusion of the Phase II activities a report will be prepared conforming with the NJDEP Remedial Investigation Guide requirements and will include the results of an area well search. It is expected that this report can be completed within 180 days of initiation of field activities. Water level elevations and ground water flow directions for the first three to four months of data will be reported.

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
DIVISION OF ENFORCEMENT FIELD OPERATIONS
Metro Bureau of Water and Hazardous Waste Enforcement
2 Babcock Place, West Orange, N.J. 07052
(201) 669-3900

June 9, 1994

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. James Lo Monte
Wallace & Tiernan, Inc.
25 Main Street
Belleville NJ 07109-3057

Dear Mr. Lo Monte,

This letter is sent to present you with an additional Notice Of Violation resulting from my inspection of your facility on June 8, 1994. It is as follows:

1) Failure to securely close each container of hazardous waste, except when filling or emptying, so that there is no escape of hazardous waste or its vapors, in violation of N.J.A.C. 7:26-9.4(d)4i.

If you have any questions, please do not hesitate to call me at (201) 669-3900.

Very Truly Yours,

Matthew G. Lust

Matthew G. Lust

E45

DCZ000191

FILE #: 07-01-11

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
& ENERGY

DIVISION OF ENFORCEMENT FIELD OFFICES

BUREAU: M

GENERATOR INSPECTION REPORT

FACILITY INFORMATION

FACILITY NAME: Wallace + Tiernan

EPA ID NUMBER: NJD 002461234 CASE NUMBER: _____

STREET ADDRESS: 25 Main Street

MUNICIPALITY: Belleville COUNTY: Essex

MAILING ADDRESS: _____

_____

TELEPHONE # 201-759-8000 x220 FAX # 201-759-0621

BLOCK : 5 LOT : 1

FACILITY PERSONNEL: Jim LoMonte - Project Coordinator
(name & title) Environmental

_____

INSPECTION DATE: 6/8/94

INSPECTOR'S NAME & TITLE: Matthew G. LUST - ENV. Spec. Tr.

_____

OTHER STATE/EPA PERSONNEL: -

REPORT PREPARED BY: LUST

REVIEWED BY: [signature] DATE OF REVIEW: 6-14-94

DEFO 29 REV. 03/04/94

DCZ000192

INSPECTION DATE(S): 6/8/94 _____ _____ _____
TIME IN: 10:25AM _____ _____ _____
TIME OUT: 2:35 PM _____ _____ _____

PHOTOS TAKEN: YES(_____) NO(✓) QUANTITY(_____) ATTACH PHOTO LOG

SAMPLES TAKEN: YES(_____) NO(✓) HOW MANY(_____) ATTACH SAMPLE LOG

SITE BACKGROUND INFORMATION

EMPLOYEES: 565 SHIFTS/WEEK: 2/5

DATE OPERATIONS BEGUN: 1915 SIC CODE: 3559

ACRES: 8 # OF BUILDINGS/SQFT: 7 buildings

PRODUCTS PRODUCED: Water and wastewater treatment equipment and controls

PREVIOUS OPERATIONS AT SITE: _____

NON-HW. TANKS ON SITE : No - all removed or closed
(provide a list of tanks, location, and capacities)

AIR PERMITS: 8 # 05831

NJPDES PERMITS: NO

UIC PERMIT: NO

POTABLE WATER ID. NUMBER: _____

WELL DIVERSION PERMIT(>100,000 gal/day): _____

PERMITS OTHER: (MUA) PVSC # 01406202

ISRA CASE NUMBER: 89-150

BUST REGISTRATION #: _____

COPY OF LAST YEARS RIGHT TO KNOW SURVEY ON SITE? yes

WATER SUPPLY-PUBLIC: Belleville WELL: _____

SOLID WASTE-POTW: PVSC SEPTIC: _____

FLOOR DRAINS: NO DISCHARGE TO: _____

EFO-001 (6/93)
was FWE-009

1/2

New Jersey Department of Environmental Protection and Energy
Division of Enforcement Field Operations
Metro Bureau of Water & Hazardous Waste Enforcement
2 Babcock Place, West Orange, N.J. 07052
(201) 669-3900

NOTICE OF VIOLATION

ID NO. NJD 002461234 DATE 6/8/94

NAME OF FACILITY Wallace + Tiernan

LOCATION OF FACILITY 25 Main Street, Belleville

NAME OF OPERATOR Jim LoMont / Project Coordinator/ENV.

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following alleged violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION NJAC 7:26 - 9.3(d)1 Quantity of waste in satellite accumulation area exceeds 55 gallons. 9.3(d)2 - Satellite accumulation containers not kept closed. 9.3(d)4 - Satellite accumulation containers not marked "Hazardous waste". 9.3(a)3 - Hazardous waste containers not marked as such. 9.6(e) - Inadequate aisle space in storage area. 9.7(i) - Failure to submit contingency plan to local authorities. 9.4(g)7 - Training records not kept. 9.4(g)8 - no semi-annual drills

Remedial action to correct these violations must be initiated immediately and be completed by July 8, 1994. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of up to $50,000 per violation.

J. LoMonte
Facility Receipt of Copy Only

Matthew G. Tuft
Investigator, Division of Enforcement Field Operations
Department of Environmental Protection & Energy

DCZ000194

TIERRA-B-008319

EFO-001 (6/93)
was FWE-009

2/2

New Jersey Department of Environmental Protection and Energy
Division of Enforcement Field Operations
Metro Bureau of Water & Hazardous Waste Enforcement
2 Babcock Place, West Orange, N.J. 07052
(201) 669-3900

NOTICE OF VIOLATION

ID NO. NJD002461234 DATE 6/8/94

NAME OF FACILITY Wallace + Tiernan

LOCATION OF FACILITY 25 Main Street, Belleville

NAME OF OPERATOR Jim LoMonte / Proj. coordinator - env.

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following alleged violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION NJAC 7:26-9.6(f)1 Failure to familiarize local authorities with Hazardous waste handled on site. 9.6(f)4 - Failure to familiarize local hospital(s) with hazardous waste handled on site.

Remedial action to correct these violations must be initiated immediately and be completed by July 8, 1994. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of up to $50,000 per violation.

J. LoMonte
Facility Receipt of Copy Only

Matthew Cr. Lust
Investigator, Division of Enforcement Field Operations
Department of Environmental Protection & Energy

DCZ000195

On June 8, 1994, I performed a RCRA inspection at Wallace and Tiernan, Inc. (Wallace) located at 25 Main Street, Belleville NJ with EPA ID# NJD 002 461 234. The facility representative was Mr. Jim Lo Monte, Project Coordinator Environmental. The company has had three (3) prior RCRA inspections in 1986, when an AONOCAPA was issued for RCRA paperwork violations, 1991 when an NOV was issued for further paperwork violations, and in 1992, when no violations were cited. For all violations, compliance was achieved. Wallace is currently undergoing ISRA under case #89-150.

Wallace manufactures potable water and waste-water treatments equipment such as pumps, flowmeters, and controls. This equipment will dispense water, gases, and solid chemicals for treatment of water in any industry where this equipment is needed. To accomplish this process, the facility will take in raw materials such as brass, iron, stainless steel, steel, plastics, or rubber in such forms as sheets, bars, tubing and piping, and cut them to company specifications. These materials will then be machined, stamped, cut, or drilled before they are washed in a hot alkaline solution, rinsed and dried. From this step, the materials may then be plated, painted, welded, deburred or a combination of these steps before being routed through different departments for assembly and shipment to customers. Materials may also come in painted or plated, which will cut out some of the steps involved. Wallace maintains departments for all these steps, plus a small print shop for making instruction booklets, and ad pamphlets which will be shipped with the

finished products.

The facility generates several hazardous waste streams in the course of daily operations. The main waste stream generated is X726 waste cutting, cooling, and lube oil from the automatic screw department as well as the drill press, CNC (computer operated machining), assembly, and lathing/cutting departments.

An X725 waste speedy-dry is also generated from cleaning up any spills or oily areas related to the heavy oil use at the facility.

A D001/F002/D035 Waste paint related material is also generated from the paint shop on site. This shop maintains three (3) spray booths and utilizes low VOC solvent based paints for equipment painting. All equipment is painted as per Wallace's specs and all paint guns are cleaned with mineral spirits. The F002/D035 portion of this waste is a result of the paint constituents.

A D008 lead waste is also generated from one (1) of three (3) Litharge stations in the assembly area. Litharge is a combination of lead oxide and glycerine which is used as pipe cement. Mr. Lo Mont stated that this litharge is the only material which will stand up to the chlorine gas which is dispensed through the equipment produced.

The plating area consists of seven (7) metal finishing lines and the waste rinsewater treatment system. The company can plate with such metals as copper, nickel, gold, silver, zinc phosphate, and chrome. The cadmium plating line once operated is no longer used. In this area, an F006 hazardous waste is generated from

one (1) press. The treatment system for rinsewater uses a cyanide destruction method and settling tank to remove solids before the water is discharged to PVSC as per Wallace's permit. The pH range for discharge is from 5 to 10.5, which Mr. Lo Monte states is easily attained. The baths will be cleaned periodically when needed which will also generate various other plating line hazardous wastes.

The parts washing station on site consists of a hot alkaline bath which removes all oils from various parts. When needed, this tub is cleaned out, pH adjusted to approximately 7, and sent off-site as X726 hazardous waste.

The print shop generates no waste from the three (3) small presses located there since all cleaning is performed by using rags and mineral spirits, which are then laundered.

The facility tour brought the inspection through the entire facility with numerous drum management violations being found. While going through the assembly area near engineering, one (1) 55 gallon satellite accumulation drum of X726 waste coolant oil was not securely closed (9.3(d)2), and one (1) 55 gallon satellite accumulation drum of X725 speedy dry was not labeled as hazardous waste (9.3(d)4).

Inspection of the paint shop revealed one (1) 55 gallon drum of D001 waste paint related material which was not securely closed (9.4(d)4i), and not marked with the accumulation start date or "hazardous waste" (9.3(a)3).

Next inspected were the three (3) litharge stations in the assembly department. The first, a 30 gallon satellite

accumulation container, was not labeled hazardous waste (9.3(d)4), while the second and third, both 55 gallon satellite accumulation containers, were not labeled hazardous waste (9.3(d)4), and not kept securely closed (9.3(d)2).

The plating area contained one (1) 55 gallon drum of chromic acid and one (1) 55 gallon satellite accumulation drum of F006 press cake. The company was cited for not having the F006 hazardous waste drum labeled as such (9.3(d)4).

Wallace's parts washing station contained three (3) 55 gallon satellite accumulation drums of X726 cutting/cooling oil. Here, the facility was cited for having the quantity of waste in a satellite accumulation area exceed 55 gallons (9.3(d)1), and not marking the containers with hazardous waste (9.3(d)4). Near this area, a 55 gallon drum containing X726 waste cutting oil was also found. For this container, the company was cited for not having the accumulation start date, or the words "hazardous waste" (9.3(a)3).

In the outdoor less than 90 day storage area, there was one (1) 55 gallon drum, and one (1) 35 gallon drum of X726 waste lube oil present. Neither were marked with the accumulation start date or as hazardous waste (9.3(a)3). Also present were 21 55 gallon drums of X726 waste coolant oil which were not labeled (9.3(a)3) and had inadequate aisle space for inspection (9.6(e)). There were no drums of F006 hazardous waste as they were recently shipped off site on 5/31/94.

Next inspected was the CNC department, and automatic screw department where the facility was cited for not having a 55

gallon satellite accumulation drum of X726 waste coolant oil, and a 55 gallon satellite accumulation drum of X725 waste speedy dry labeled as hazardous waste (9.3(d)4).

The drill press department maintained one (1) 55 gallon satellite accumulation drum of X725 waste speedy dry which was not kept securely closed (9.3(d)2).

Last to be inspected was the maintenance shop. In this area, the facility maintains one (1) Safety-Kleen parts washer, and one (1) 55 gallon satellite accumulation drum of F002 wash solvent. Wallace was cited for the drum of wash solvent not labeled with the words "hazardous waste" (9.3(d)4).

The company's manifests were then reviewed, with no violations being found. The remaining RCRA documentation, however had some deficiencies. In this area, Wallace was cited for failure to submit the contingency plan to local authorities (9.7(i)), not maintaining training records (9.4(g)7), and not performing semi-annual drills(9.4(g)8). Further, the company was cited for failure to familiarize local authorities with the hazardous wastes handled on site (9.6(f)1), and failure to notify the hospitals of the same (9.6(f)4).

For aforementioned violations, Mr. Lo Monte was given an NOV with a compliance date of July 8, 1994.

No LDR violations were present, therefore no notification to EPA is necessary.

HAZARDOUS WASTE INVENTORY

LOCATION	WASTE CODES	DESCRIPTION	QUANTITY PRESENT
assembly near engineering	X726	waste coolant oil	1x55 gal
"	X725	contaminated speedy-dry	1x55 gal
paint shop	D001	waste paint related mat.	1x55 gal
Litharge dept in Assembly	D008	waste Litharge	1x30 gal
"	D008	"	1x55 gal
"	D008	"	1x55 gal
plating area	D007	waste Cromic acid	1x55 gal
plating area	F006	waste press cake	1x55 gal
wash station	X726	waste coolant oil	1x55 gal
"	X726	waste cutting oil	2x55 gal
<90 day storage	X726	waste lube oil	1x55 gal 1x35 gal
"	X726	waste coolant oil	21x55 gal
"	X725	waste speedy-dry	2x55 gal
CNC area (computer operation)	X726	waste coolant oil	1x55 gal
automatic screw	X725	waste speedy-dry	1x55 gal
drill press area	X725	"	1x55 gal
maint. shop	F002	spent solvent	1x55 gal

add additional pages as needed

MANIFESTS REVIEWED

Manifests reviewed from 1/1/92 through 6/1/94

Number of manifests in compliance: 113

Number of manifests NOT in compliance: 0

Total number of manifests reviewed: 113

According to the manifests, does the facility import or export any waste? YES___ NO ✓

(if yes, complete the import/export section of this report)

List manifest document numbers of those manifests not in compliance and note each deficiency.

Attach copies of manifests which have deficiencies.

Manifest#	DATE	N.J.A.C.7:26-	Comments

add additional pages as needed

GENERATOR INDEX

CHECK THE SECTIONS AND ACTIVITIES OF THIS REPORT WHICH ARE APPLICABLE TO THE FACILITY AND COMPLETE THOSE SECTIONS FOR THIS INSPECTION.

SECTIONS NOT APPLICABLE ARE NOT INCLUDED IN THE REPORT.

GENERATOR WASTE MANAGEMENT PRACTICES

SECTION 1

MULTI MEDIA INSPECTION CHECKLIST

THE FOLLOWING CHECKED AREAS OF CONCERN WERE IDENTIFIED. EACH APPROPRIATE SECTION OF THE MULTIMEDIA CHECKLIST WAS COMPLETED AND IS INCLUDED IN THE REPORT.

#	SECTION	
1.	AIR POLLUTION CONTROL	_____
2.	WATER POLLUTION CONTROL	_____
3.	UNDERGROUND STORAGE TANKS	_____
4.	TOXIC SUBSTANCES CONTROL ACT (TSCA)	_____
5.	EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW	_____
6.	SPILL PREVENTION (DISCHARGE PREVENTION), CONTROL, AND COUNTERMEASURES (SPCC & DPCC) PLANS	_____
7.	WETLANDS	_____
8.	ISRA (FORMERLY ECRA)	_____
9.	SPILL ACT	_____

SECTION 2

WASTE DETERMINATION

	YES	NO
DOES the facility generate "solid waste".	✓	
DOES the facility generate a "hazardous waste".	✓	
IS THE FACILITY CORRECTLY CLASSIFYING ITS WASTES?	✓	

IF NO, CHECK THE ITEMS OF NON COMPLIANCE.

8.5(a) Generator failed to determine if its "solid waste" is hazardous? _____

8.5(f) Generator failed to keep records of test results, analysis, or other determination for 3 years. _____

7.4(a)4x Generator FAILED to properly classify its waste according to the "Hierarchy". _____

COMMENTS

add additional pages as needed

SECTION 3.

GENERATOR STATUS

	YES	NO
Does the generator generate/accumulate >100 kg of hazardous waste (1 kg acutely) or greater than 1001 gal of listed waste oil in any calender month? (except x725 - 100 kg rule applies)	✓	

IF YES,

7.4(a)1 The Generator <u>failed to</u> have an EPA ID number.		✓

IF THE GENERATOR IS A SQG,

Does the generator wish to deactivate his EPA ID. number?		

COMMENTS

SECTION 4

SATELLITE ACCUMULATION AREAS

	YES	NO
IS THE FACILITY IN COMPLIANCE WITH THE SATELLITE ACCUMULATION REGULATIONS?		✓

IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.

9.3(d)1	Quantity of waste EXCEEDS 55 gal.or 1 qt. of acutely hazardous waste.	✓
9.3(d)2	Containers FAIL to:	
	Meet the standards of 7.2 (Container Requirements).	
	Poor or leaking container.	
	Container made of incompatible material.	
	Container not kept securely closed.	✓
9.3(d)3	Accumulation area is:	
	NOT at or near a point of generation.	
	NOT under the control of the operator.	
9.3(d)4	Containers NOT marked "Hazardous waste".	✓
9.3(d)5	Containers NOT marked with date when filled.	
9.3(d)6	Containers NOT moved from satellite area within three days.	

COMMENTS

SECTION 5

GENERATOR CONTAINER ACCUMULATION AREAS

	YES	NO
IS THE FACILITY IN COMPLIANCE WITH THE GENERATOR STORAGE REGULATIONS?		✓

IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.

7.2(a)	NO manifest number on containers ready for disposal.	
7.2(b)	Containers FAILED to meet DOT regulations. (49CFR 171,179) specs for packaging/labeling.	
9.3(a)1	Waste ACCUMULATED OVER 90 DAYS.	
9.3(a)3	Containers NOT marked with accumulation start date or "Hazardous Waste".	✓
9.4(d)1i	Containers NOT of adequate construction.	
9.4(d)1ii	Closures NOT of sufficient strength.	
9.4(d)2	Containers NOT in good condition/owner FAILED to transfer.	
9.4(d)3	Containers NOT compatible with waste.	
9.4(d)4i	Containers NOT kept closed.	✓
9.4(d)4iii	Containers NOT managed properly to prevent rupture/leak.	
9.4(d)4iv	Hazardous wastes NOT segregated by waste type.	
9. 4(d)4v	ID Labels NOT visible.	
9.4(d)5	Accumulation area NOT inspected daily.	
9.4(d)6	Containers of ignitable and reactive wastes NOT located at least 50 feet from the facility's property line.	
9.6(d)	Access to communication or alarm system is NOT maintained.	
9.6(e)	INADEQUATE aisle space.	✓

COMMENTS:

SECTION 6

ABOVE GROUND TANKS

IS THE FACILITY IN COMPLIANCE WITH THE ABOVE GROUND <90 DAY STORAGE TANK REGULATIONS? YES ___ NO ___ NA ✓

IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.

If the generator stores hazardous waste in an above ground tank for <90 days, the generator FAILED to:

9.3(b) Have a letter of approval. ___

9.3(b)2 Have overfilling controls. ___

9.3(b)3 Have secondary containment. ___

9.3(b)4 Insure that 99% of the tank can be emptied. ___

9.3(b)5 Empty the tank every 90 days. ___

9.3(b)8 If part of the tank is below grade, all of the tank CANNOT be visually inspected. ___

9.3(b)9 Label or mark the tank(s) with the words "HAZARDOUS WASTE". ___

COMMENTS:

SECTION 7

WASTE OIL USAGE

	YES	NO
IS THE FACILITY IN COMPLIANCE WITH THE WASTE OIL STORAGE REGULATIONS?	✓	

IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.

The generator ONLY generates or accumulates less than 1001 gals. of waste oil per month* and:

7.7(d) Generator FAILED to obtain receipts and retain them for three years. _____

7.7(d) Generator FAILED to use authorized hazardous waste hauler. _____

7:26A-6.3(b) Generator MIXED other contaminants with waste oil. _____

9.2(b) If under ground tanks are used to store waste oil, the generator is NOT a:

1. New commercial service station waste oil tanks of < 1001 gal capacity* _____

or does NOT:

2. Use underground tanks in existence and in use for Hazardous Waste storage prior to 1/17/83. _____

*NOTE: (A) If the generator disposes of over 100kg of hazardous waste and any listed waste oil in the same month, he must manifest off the waste oil but may not have to comply with subchapter 9 requirements for waste oil (see C below).

(B) If the generator generates >1001 gal. of waste oil in any given month, he MUST use a hazardous waste manifest for all qualities over the first 1001 gallons.

(C) If the generator accumulates >1001 gal. of waste oil in any given month, he MUST be in compliance with ALL generator subchapter 9 requirements. All appropriate sections of the generator checklist should be completed.

SECTION 8

WASTE MANAGEMENT PRACTICES

	YES	NO
IS THE FACILITY IN COMPLIANCE WITH THE WASTE MANAGEMENT REGULATIONS?	✓	

IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.

12.1(a)	Generator IS ACTING as a TSDF by:	
	1. Treating hazardous waste.	
	2. Storing hazardous waste.	
	3. Disposing of hazardous waste on site.	
9.3(a)1	Site IS ACTING as a generator but accumulating waste in containers or approved tanks for more than 90 days.	
9.2(a)2	Hazardous waste IS handled in a manner which causes or may cause a spill.	
9.2(b)1	Hazardous waste IS stored in a new UST	
9.2(b)2	Hazardous waste IS stored in an existing UST.	
9.2(b)4	Hazardous waste IS stored in waste piles.	
9.2(b)5	Dioxin hazardous waste IS applied to the land.	
9.2(b)6	PCB hazardous waste IS disposed of in a landfill.	
9.2(b)7	Equipment containing PCB hazardous waste IS disposed of in a landfill.	
9.2(b)8	PCB hazardous waste IS disposed of in an unauthorized incinerator.	
9.2(c)	Hazardous waste IS discharged improperly to a sewer system.	
9.2(d)	Acutely hazardous waste IS disposed of in a landfill.	

IF THE FACILITY IS ACTING AS A TSDF, COMPLETE THE TSD REPORT.

COMMENTS:

SECTION 9

GENERATOR MANIFESTS

	YES	NO
IS THE FACILITY IN COMPLIANCE WITH THE GENERATOR MANIFEST REGULATIONS?	✓	

IF NO, CHECK THE ITEMS OF NONCOMPLIANCE

7.4(a)3	Generator FAILED to prepare a Hazardous Waste Manifest.	
7.4(a)4	Each manifest failed to have the following information:	
7.4(a)4i	Generator's name, mailing address (site address if different), and phone number.	
7.4(a)4ii	The generator's EPA ID number.	
7.4(a)4iii	The transporter(s) name, phone number, NJ registration numbers.	
7.4(a)4iv	The transporter(s) EPA ID number.	
7.4(a)4v	The name, address and phone number of the designated TSD facility.	
7.4(a)4vi	The TSDF's EPA ID number.	
7.4(a)4vii	The proper USDOT description.	
7.4(a)4vii	Complete NOS information in item J.	
7.4(a)4viii	Special handling instructions, including DOT descriptions for NOS material & 2 major constituents, a 24 hour emergency number, as per 49CFR172.201(d), or decal number.	
7.4(a)5i	The generator signature and date.	
7.4(a)5ii	Transporter's signature & date.	
7.4(a)5iii	Generator FAILED to retain copy and forward copies to the state of origin & state of destination.	
7.4(a)5v	Generator FAILED to give the remaining copies to hauler.	
7.4(e)1	Generator FAILED to properly complete manifest.	
7.4(e)2	Generator FAILED to use a registered Transporter.	
7.4(e)3	Generator FAILED to designate an authorized TSD or reuse facility.	

7.4(e)4	Generator FAILED to utilize an authorized TSD.	_____
7.4(f)	Generator FAILED to maintain the following facility records for three (3) years:	
7.4(f)1	Manifests.	_____
7.4(f)2	Annual and/or exception reports.	_____
7.4(f)3	Generator FAILED to maintain records during the course of unresolved enforcement action or as requested.	_____
7.4(g)1	Generator FAILED to submit annual report on time.	_____
7.4(g)2	Generator, who stores waste >90 days, FAILED to submit annual report of treatment & disposal activities on time.	_____
7.4(h)1	When the generator has FAILED to receive signed copies of all manifests, he Failed to notify the TSD or Department within 35 days.	_____
7.4(h)2	Generator FAILED to file exception reports within 45 days.	_____

COMMENTS:

SECTION 10

HAZARDOUS WASTE EXPORTATION

	YES	NO	
IS THE FACILITY IN COMPLIANCE WITH THE EXPORT REQUIREMENTS OF THE REGULATIONS?	___	___	NA / ✓

IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.

If the generator **EXPORTS** waste, he FAILED to:

7.4(c)1	Notify EPA & the Department of its intent to export 60 days prior to export.	_____
7.4(c)1i	Provide the following information:	
	Exporter's name, address, phone number, & EPA ID. number.	_____
	Consignee name and address.	_____
	Description of hazardous waste, waste code, DOT shipping name, class & ID. number.	_____
	Frequency & time period, & total quantity of waste.	_____
	All points of entry, departure, & transit from each foreign country the waste will pass through.	_____
	Description of how the waste will be transported.	_____
	Description of how the waste will be treated, stored, or disposed of.	_____
7.4(c)4	Provide EPA & NJDEPE with written renotification of any change in the conditions of the original notification.	_____
7.4(c)5	Obtain EPA acknowledgement of consent from the receiving country.	_____
7.4(c)6	Use a NJ manifest and/or comply with special manifest requirements.	_____
7.4(c)7	Insure that the acknowledgement is attached to each manifest.	_____
7.4(g)4	Submit an annual report to the EPA.	_____

The exporter FAILED to file an exception report when:

7.4(d)1 Exporter does not have a signed copy of the manifest, stating date & place of departure, from transporter within 45 days. _____

7.4(d)2 Exporter has not received written conformation from foreign consignee within 90 days that waste was received. _____

7.4(d)3 The waste was returned to the US. _____

COMMENTS:

SECTION 11

CONTINGENCY PLAN AND EMERGENCY PROCEDURES

	YES	NO
IS THE FACILITY IN COMPLIANCE WITH THE CONTINGENCY PLAN & EMERGENCY PROCEDURES REGULATIONS?	___	✓

IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.

9.7(a)	NO written contingency plan.	___
9.7(b)	Generator FAILED to implement the plan in an emergency.	___
9.7(c)	Plan FAILED to describe the response actions facility personnel and local authorities shall take.	___
9.7(d)	Generator has a DPCC or SPCC Plan and FAILED to amend that plan to incorporate hazardous waste management.	___
9.7(e)	Plan FAILS to describe arrangements agreed to by local authorities.	___
9.7(f)	Plan FAILS to list names, addresses, and phone numbers (office and home) of emergency coordinators.	___
9.7(g)	Plan FAILS to include a list, location, AND CAPABILITIES of all emergency equipment.	___
9.7(h)	Plan FAILS to describe evacuation procedures, evacuation signal(s) AND routes.	___
9.7(i)	Generator FAILED to:	
	1. Keep a copy of the plan at the facility.	___
	2. Submit the contingency plan to local authorities.	✓
9.7(j)	Generator FAILED to revise the contingency plan when:	
	1. Applicable regulations are revised.	___
	2. The plan fails.	___
	3. The facility changes.	___
	4. The Emergency Coordinator changes.	___
	5. The emergency equipment changes.	___
9.7(k)	Emergency coordinator NOT available.	___

9.2(a)2 Hazardous waste IS stored in a manner which may or does cause a discharge. _____

N.J.S.A. 58:10-23.11(C) There is a discharge of a hazardous substance. _____

N.J.S.A. 58:10-23.11(E) Facility FAILED to report the discharge. _____

COMMENTS:

SECTION 12

PERSONNEL TRAINING

		YES	NO
	IS THE FACILITY IN COMPLIANCE WITH THE PERSONNEL TRAINING REGULATIONS?	____	____ ✓
	IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.		
9.4(g)2	Training program **NOT** directed by a person trained in hazardous waste management procedures and,		
9.4(g)3	**NOT** designed to ensure that facility personnel are able to respond effectively to emergencies.		____
9.4(g)3	Program **FAILS** to include the following response emergency response procedures and equipment:		
9.4(g)3i	Use of personnel safety equipment.		____
9.4(g)3ii	Procedures for using facility emergency and monitoring equipment.		____
9.4(g)3iii	Key parameters for automatic waste feed cut-off systems.		____
9.4(g)3iv	Procedures for utilizing communications or alarm systems.		____
9.4(g)3v	Responds procedures for fires & explosions.		____
9.4(g)3vi	Ground water contamination responds procedures.		____
9.4(g)3vii	Shutdown procedures.		____
9.4(g)4	Personnel have **NOT** successfully completed training within six months of the date of their employment or assignment to a new position at the facility.		____
9.4(g)5	Personnel do **NOT** take part in an annual review of training.		____
9.4(g)6	**NO** written documentation of the following:		
9.4(g)6i	Job title for each position and the name of the employee filling each job.		____
94(9)6ii	A written job description.		____
9.4(g)6iii	Description of the training given to personnel.		____
9.4(g)6iv	Documentation of actual training.		____
9.4(g)7	Training records **NOT** kept.		____ ✓

9.4(g)8 Semi-annual drills, involving all employees and local authorities **NOT** conducted. ✓

AND,

9.4(g)8i Generator **FAILED** to petition the Department for an exemption from the drill requirement. _____

OR

9.4(g)8ii Generator **FAILED** to petition the Department for an exemption excluding local officials. _____

COMMENTS

SECTION 13

PREPAREDNESS AND PREVENTION

		YES	NO
IS THE FACILITY IN COMPLIANCE WITH THE PREPAREDNESS & PREVENTION REGULATIONS?		____	____
IF NO, CHECK THE ITEMS OF NONCOMPLIANCE.			
9.6(b)	Facility FAILS to have:		
9.6(b)1	Communications or alarm system.		____
9.6(b)2	A telephone or device to summon emergency assistance.		____
9.6(b)3	Portable emergency equipment.		____
9.6(b)4	Adequate Water supply.		____
9.6(c)	Generator FAILED to test and maintain emergency equipment.		____
9.6(f)	Generator FAILED to:		
9.6(f)1	Familiarize Police, fire departments, and emergency response teams with the layout of the facility, & hazardous waste handled.		✓ ____
9.6(f)2	Have an agreement designating primary emergency authority to a specific police and fire department where more than one Police and fire department are involved.		____
9.6(f)3	Make agreements with emergency response contractors, and equipment supplier.		____
9.6(f)4	Make arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries result from fires, explosions, or discharges at the facility.		✓ ____
9.6(f)5	Make arrangements with local fire departments to inspect the facility on a regular basis with at least two (2) inspections annually.		____
9.6(f)6	Document when authorities identified in (f)1 through 5 above declined to enter into such arrangements.		____

RCRA LAND DISPOSAL RESTRICTIONS INSPECTION

I. General Information

Facility Name: Wallace + Tiernan, INC.

U.S. EPA ID#: NJD 002 461 234 SIC Code: 3559

Street: 25 Main Street

City: Belleville State: NJ Zip: 07109-3057

Telephone #: 201-759-8000 Telefax #: 201-759-0621

Inspection Date: 6/8/94 Time: 10:25 AM

	Name	Agency/Title	Telephone #
Inspectors:	Matthew LUST	NJDEPE/ENV. Spec. Tr.	201-669-3900
Facility Reps*:	James Lo Monte	W+T/Project coordinator ENV.	201-759-8000 x220

* - Primary Environmental Contacts

See Appendix B to determine which of the following LDR waste categories the facility manages:

	Generate	Transport	Treat	Store	Dispose
F001-F005	X	___	___	___	___
F020-F023 & F026-F028	___	___	___	___	___
California List	___	___	___	___	___
First Third	X	___	___	___	___
Second Third	___	___	___	___	___
Third Third	X	___	___	___	___

INSPECTION SUMMARY

Processes that Generate LDR Wastes:

LDR Waste Management:

Summary of Potential LDR Violations:

Inspector Name and Title: _____

Signature: _____

RCRA LAND DISPOSAL RESTRICTIONS INSPECTION

I. Waste Code Determination

1. Have all wastes been correctly identified for purposes of compliance with 40 CFR Part 268?

   Yes ✓ No_____

   If no, list below:

Assigned Classification	Correct Classification

   Comments: _____

2. Have both the listed and characteristic waste code been assigned, where a listed waste exhibits a characteristic? [40 CFR 268.9(a)]

   Yes ✓ No_____ NA_____

   Comments: _____

3. Has multi-source leachate been assigned the F039 waste code [40 CFR 261.31]?

   Yes_____ No_____ NA ✓

   If yes, was single-source leachate combined to form multi-source leachate [55 FR22623]?

   Yes_____ No_____

   Comments: _____

II. GENERATOR REQUIREMENTS

A. Treatability Group/Treatment Standard Identification

1. F001-F005 Spent Solvent Wastes: Does the generator correctly determine the appropriate treatability group/treatment standard (* wastewater vs. non-wastewater) for each F-solvent?

   Yes ✓ No_____ NA_____

   If No, list below:

Waste Code	Assigned Classification	Correct Classification

   Comments: _____

* < 1% by weight total organic carbon (TOC), < 1% by weight total F001-F005 solvent constituents listed in 40 C.F.R. Table CCWE [40 C.F.R. 268.2(f)(1)]

2. F020-F023 and F026-F028 Dioxin Wastes: Does the generator correctly determine the appropriate treatability group/treatment standard (* wastewater vs. non-wastewater) for each dioxin waste?

Yes_____ No_____ NA✓_____

If no, list below:

Waste Code	Assigned Classification	Correct Classification

Comments:_____

* < 1% TOC by weight and < 1% total suspended solids (TSS) by weight [40 C.F.R. 268.2(f)]

3. First, Second, and Third Third Wastes:

a. Does the generator correctly determine the appropriate treatability group/treatment standard for each waste (i.e. subcategory and *wastewater vs. non-wastewater)?

Yes✓_____ No_____ NA_____

If no, list below:

Waste Code	Assigned Subcategory	Correct Subcategory	Assigned wastewater vs. nonwastewater designation	Correct wastewater vs. nonwastewater designation

* < 1% TOC by weight and < 1% TSS with the following exceptions: K011, K013, and K014 wastewaters - less than 5% by weight TOC and less than 1% by weight TSS; K103 and K104 wastewaters - less than 4% by weight TOC and less than 1% by weight TSS. [40 C.F.R. 268.2(f)(2) and (3)]

Comments:_____

b. Do the assigned treatment standards for listed wastes cover constituents that may cause the waste to exhibit any characteristics? [40 CFR 268.9(b)]

Yes✓_____ No_____ NA_____

c. Does the generator specify alternative treatment standards for lab packs?

Yes_____ No_____ NA✓_____

If yes, do lab packs only contain the following wastes* ? [40 CFR 268.42(c)(2)]

_____ Organometallics: 40 Part 268, Appendix IV constituents
_____ Organics: 40 Part 268, Appendix V constituents

* Unregulated wastes and hazardous wastes which meet treatment standards may be commingled in the appropriate Appendix IV and V lab pack. [55 FR 22629]

d. Does the generator specify alternative treatment standards for F039 multi-source leachate?

Yes_____ No_____ NA✓

4. California List Wastes: Has the generator correctly identified the treatability group and treatment standard/prohibition level for the following wastes [55 FR 22675] ?

a. Liquid hazardous wastes containing PCB's ≥ 50 ppm

Yes_____ No_____ NA✓

If yes, check the appropriate treatability group:

_____ 50 to 500 ppm PCB's

_____ ≥ 500 ppm PCB's

b. Listed or characteristic wastes containing ≥ 1,000 mg/l (liquids) or mg/kg (non-liquids) HOC's, which are not listed or characterized by the HOC content.

Yes_____ No_____ NA✓

If yes, check the appropriate treatability group:

_____ Dilute HOC wastewater (1,000 mg/l-10,000mg/l HOCs)

_____ All other HOC's greater than or equal to the prohibition level of 1,000 mg/l (liquids) or mg/kg (non liquids)

c. Liquid hazardous wastes that exhibit a characteristic and also contain ≥ 134 mg/l nickel and/or ≥ 130 mg/l thallium.

Yes_____ No_____ NA✓

5. Treatment standards expressed as required technologies: Has the generator specified an alternative method to that required in 40 CFR 268.42?

Yes_____ No✓ NA_____

If yes, list the waste code, the technology specified in 40 CFR 268.42, the alternative method and documentation of approval [40 CFR 268.42(b)].

Waste Code	Required Technology	Alternative Method	Approval

Comments: _____

6. Does the generator mix restricted wastes with different treatment standards for a constituent of concern?

Yes____ No✓____

If yes, did the generator select the most stringent treatment standards? [40 CFR 268.41(b) and 268.43(b)]

Yes____ No____

Comments: _____

B. Waste Analysis

1. Does the generator determine whether restricted wastes exceed treatment standards/prohibition levels at the point of generation? [268.7(a)]

Yes✓____ No____

If no, does the generator ship all restricted wastes as not meeting treatment standards?

Yes____ No____

Comments: _____

2. Which of the following analytical methods does the generator employ?

a. Knowledge of waste:

Yes✓____ No____

If yes, list the wastes for which applied knowledge was used and describe the basis of determination. Attach documentation. [40 CFR 268.7(a)(5)]

_____

_____

b. TCLP: Are wastes with treatment standards specified in 40 CFR 268.41 analyzed using TCLP? (BDAT=stabilization/immobilization technology) Examples: D004-D011, and F001-F009, etc.

Yes✓____ No____ NA____

If yes, list the wastes for which TCLP was used and provide the date of last test, the frequency of testing, and note any problems. Attach sample of typical test results [40 CFR 268.7(a)(5)].

_____

_____

c. Total constituent analysis: Are wastes with treatment standards specified in 268.43 analyzed using total constituent analysis? (BDAT=destruction/removal technology) Examples: D001-D003, majority of P and U wastes, etc.

Yes✓____ No____ NA____

If yes, list the wastes for which total constituent analysis was used and provide the date of last test, the frequency of testing, and note any problems. Attach sample of typical test results [40 CFR 268.7(a)(5)].

_____

_____

d. PFLT* : Was PFLT used to determine if California List constituents were contained in *liquid* hazardous waste?

Yes ✓ No____ NA____

* PFLT = Paint Filter Liquids Test [Test Method 9095, EPA Publication No. SW-846]

If yes, list the wastes for which PFLT was used and provide the date of last test, the frequency of testing, and note any problems. Attach sample of typical test results. [40 C.F.R. 268.7(a)(5)]

_____

_____

3. Does the generator treat restricted wastes in < 90 day tanks or containers regulated under 40 CFR 262.34? (Examples: elementary neutralization, etc)

Yes____ No ✓ (If No, go to 4)

Does the generator treat the wastes to meet appropriate treatment standards/prohibition levels?

Yes____ No____

If yes, has the generator prepared a waste analysis plan detailing the frequency of testing to be conducted? [40 CFR 268.7(a)(4)]

Yes____ No____ (If No, go to 4)

Does the plan fulfill the following? [40 CFR 268.7(a)(4)(i)]

____ Based on a detailed chemical and physical analysis of a representative sample.

____ Contains information necessary to treat the wastes in accordance with 40 CFR Part 268 requirements.

Has the plan been filed with the Regional Administrator (Receipt required for verification)? [40 CFR 268.7(a)(4)(ii)]

Yes____ No____

Comments:_____

4. Dilution Prohibition [40 CFR 268.3]:

a. Does the generator mix prohibited* wastes with different treatment standards?

Yes____ No ✓ (If No, go to b)

List the wastes:_____

Are the wastes amenable to the same type of treatment? [55 FR 22666]

Yes_____ No_____

* Prohibited wastes must be treated to established treatment standard prior to land disposal.

Comments:_____

b. Does the generator dilute prohibited wastes to meet treatment standard criteria, or render them non-hazardous? [55 FR 22665-22666]

Yes_____ No✓_____ (If No, go to c)

Check appropriate category:

_____ Dilutes to meet treatment standards

_____ Dilutes to render waste non-hazardous

Do the wastes fall into the following categories? [40 CFR 268.3(b)]

_____ Managed in treatment systems regulated under the Clean Water Act

_____ Non-Toxic* characteristic wastes

_____ Treatment standard specified in 40 CFR 268.41 or 268.43

* Non-toxic = D001 (except high TOC nonwastewaters), D002, and D003 (except cyanides and sulfides). [55 FR 22666]

If the wastes do not fall into the above categories, briefly describe the conditions under which they were diluted:

_____

c. Based on an assessment of points a. and b. and any other relevant circumstances, does the generator dilute prohibited wastes as a substitute for adequate treatment? [40 CFR 268.3(a)]

Yes_____ No✓_____

Comments:_____

5. F039 Multi-source leachate: Has the generator run an initial analysis for all constituents of concern in 40 CFR 268.41 and 268.43? [55 FR 22620]

Yes_____ No_____ NA✓_____

C. Management

1. On-Site Management

a. Are restricted wastes treated (other than in a RCRA exempt unit), stored for greater than 90 days, or disposed on site?

Yes_____ No✓_____ (If yes, complete TSD Checklist)

Comments: _____

b. If the generator treats characteristic wastes in systems regulated under the Clean Water Act, have the following been documented: the determination of restriction, how restricted wastes are managed, and why wastes discharged pursuant to a NJPDES permit are not prohibited (if applicable)? [55FR 22662]

Yes_____ No_____ NA✓_____

c. If the generator treats characteristic wastes in RCRA exempt units to render them non-hazardous, are the wastes managed as restricted until 40 CFR 268 treatment standards are met*? [40 CFR 268.9(d)]

Yes_____ No_____ NA✓_____

* This applies to both concentration based treatment standards specified in 40 CFR 268.41 and 268.43, and to some 40 C.F.R. 268.42 required methods which result in treatment below the characteristic level. See Appendix D.

2. Off Site Management: Waste Exceeds Treatment Standards

a. Does the generator ship any waste that exceeds treatment standards/prohibition levels to an off-site treatment or storage facility?

Yes✓_____ No_____ (If No, go to 3)

Does the generator provide a notification to the treatment or storage facility? [40 CFR 268.7(a)(1)]

Yes✓_____ No_____ (If No, go to 3)

If the generator specifies alternative treatment standards for lab packs, is the certification required in 40 CFR 268.7(a)(7) or (8) included with the notification?

Yes_____ No_____ NA✓_____

b. Is a notification sent with each waste shipment?

Yes✓_____ No_____

If no, is the waste subject to a tolling agreement pursuant to 262.20(e) [SQG only]* ?

Yes_____ No_____ (If No, go to 3)

* Small quantity generator = generator of greater than or equal to 100 kg/month but less than 1,000 kg/month hazardous waste, or less than 1 kg/month of acutely hazardous waste. (NJ criteria = <100 kg/month of hazardous waste or <1 kg/month of acutely hazardous waste)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

Waste Code	Subsequent Handler	Waste Code	Subsequent Handler

Did the SQG provide a notification to the receiving facility with the first waste shipment subject to the tolling agreement [40 CFR 268.7(a)(9)]?

Yes_____ No_____

3. Off-Site Management: Waste Meets Treatment Standards

a. Does the generator ship waste that meets treatment standards/prohibition levels to an off-site disposal facility?

Yes_____ No✓_____ (If No, go to 4)

Identify waste code(s) and off-site disposal facilities:

Waste Code	Receiving Facility
_____	_____
_____	_____

Note: Include documentation supporting the generator's determination that the waste meets applicable treatment standards/prohibition levels.

Does the generator provide a notification and certification to the disposal facility? [40 CFR 268.7(a)(2)(i) and 268.7(a)(2)(ii)]

Yes_____ No_____ (If No, go to D)

b. Are a notification and certification sent with each waste shipment?

Yes_____ No_____

If no, is the waste subject to a tolling agreement pursuant to 262.20(e)? (SQG only)

Yes_____ No_____ (If No, go to c)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

Waste Code	Subsequent Handler	Waste Code	Subsequent Handler
_____	_____	_____	_____

Did the SQG provide a notification and certification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes_____ No_____

c. Are characteristic wastes which have been rendered non-hazardous (in a RCRA exempt unit) shipped to a Subtitle D facility?

Yes_____ No_____ NA_____ (If No or NA, go to 4)

Complete the following table:

Waste Code	Receiving Facility	Waste Code	Receiving Facility
_____	_____	_____	_____

Are a notification and certification for each shipment sent to the Regional Administrator or authorized State? [40 CFR 268.9(d)(1) and 268.7(b)(5)]

Yes_____ No_____

4. Records Retention

Does the generator retain on site copies of all notifications, certifications, and other relevant documents for a period of 5 years? [40 CFR 268.7(a)(6)]

Yes ✓ No_____

Are copies of relevant tolling agreements, along with the LDR notification and/or certification, kept on site for at least 3 years after expiration or termination of the agreement? [40 CFR 268.9]

Yes ✓ No_____ NA_____

Do LDR documents reflect proper management of wastes previously covere under case by case extensions?

Yes ✓ No_____ NA_____

Comments:_____

D. Treatment Using RCRA 40 CFR Parts 264 and 265 Exempt Units or Processes

1. Are restricted wastes treated in RCRA exempt units (distillation unit wastewater treatment tanks, elementary neutralization, etc.)?

Yes ✓ No_____ (If No, do not complete this section)

List types of waste treatment units and processes:

Waste Code	Type of Treatment	Treatment units and proces
X726	Neutralization	55 gal drum, pH adjustment to ~7.0

2. Are treatment residuals generated from these units?

Yes ✓ No_____

Comments:_____

3. Are residuals further treated, stored for greater than 90 days, or disposed on site?

Yes_____ No ✓ NA_____

(If yes, the TSD checklist must be completed)

Waste Minimization Checklist

GENERATOR CHECKLIST

Manifest

General 262.20

	YES	NO	N/A
Does the generator, offer for transportation, hazardous waste for off-site treatment/disposal? If yes, proceed to next question. If no, proceed to 264.75/265.75.	✓		
262.23 Does the generator sign the manifest certification which states;	✓		
"If I am a large quantity generator, I have a program in place to reduce the volume and toxicity of the waste generated to the degree I have determined to be economically practical and that I have selected the practical method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford."			
Does the generator have a written Waste Minimization Plan?		✓	
If no, is the generator able to describe his plan orally?	✓		

COMMENTS:
(Explain in this space the areas that visually show evidence that a program is in place and is being implemented)

Cadmium plating line disassembled, and an oil recycling pump for coolant oil is under construction.

DCZ000232

ANNUAL/BIENNIAL REPORT

262.41	YES	NO	N/A
Has the generator submitted Annual (AR) or Biennial reports (BER) to the appropriate regulatory agency?	✓		

The inspector should review these reports prior to the inspection (see above), and should try to verify the information in the report during his/her site inspection. The following questions should be addressed during the inspection.

262.56(a)(5)			
Does the BER or AR include the efforts undertaken during the year to reduce the volume of toxicity of the wastes generated?	✓		
Does the BER or AR include a description of the changes in volume and toxicity of the wastes actually achieved during the year in comparison to previous years?	✓		
Do these efforts match the information contained in the generator's written or verbally described waste minimization program?	✓		
Is the BER or AR certification signed by the generator or authorized representative?	✓		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

DEC - 8 2005

GENERAL NOTICE LETTER
URGENT LEGAL MATTER
PROMPT REPLY NECESSARY
CERTIFIED MAIL-RETURN RECEIPT REQUESTED

George Cornelius, President and CEO
Arkema Incorporated
2000 Market Street
Philadelphia, PA 19103-3222

RE: Diamond Alkali Superfund Site
Notice of Potential Liability for
Response Actions in the Lower Passaic River Study Area, New Jersey

Dear Mr. Cornelius:

The United States Environmental Protection Agency ("EPA") is charged with responding to the release and/or threatened release of hazardous substances, pollutants, and contaminants into the environment and with enforcement responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §9601 et seq. Accordingly, EPA is seeking your cooperation in an innovative approach to environmental remediation and restoration activities for the Lower Passaic River.

EPA has documented the release or threatened release of hazardous substances, pollutants and contaminants into the six-mile stretch of the river, known as the Passaic River Study Area, which is part of the Diamond Alkali Superfund Site ("Site") located in Newark, New Jersey. Based on the results of previous CERCLA remedial investigation activities and other environmental studies, including a reconnaissance study of the Passaic River conducted by the United States Army Corps of Engineers ("USACE"), EPA has further determined that contaminated sediments and other potential sources of hazardous substances exist along the entire 17-mile tidal reach of the Lower Passaic River. Thus, EPA has decided to expand the area of study to include the entire Lower Passaic River and its tributaries from Dundee Dam to Newark Bay ("Lower Passaic River Study Area").

By this letter, EPA is notifying Arkema Incorporated of its potential liability relating to the Site pursuant to Section 107(a) of CERCLA, 42 U.S.C. §9607(a). Under CERCLA, potentially responsible parties ("PRPs") include current and past owners and operators of a facility, as well as persons who arranged for the disposal or treatment of hazardous substances at the Site, or the transport of hazardous substances to the Site.

In recognition of our complementary roles, EPA has formed a partnership with USACE and the New Jersey Department of Transportation-Office of Maritime Resources ("OMR") ["the governmental partnership"] to identify and to address water quality improvement, remediation, and restoration opportunities in the 17-mile Lower Passaic River. This governmental partnership is consistent with a national Memorandum of Understanding ("MOU") executed on July 2, 2002 between EPA and USACE. This MOU calls for the two agencies to cooperate, where appropriate, on environmental remediation and restoration of degraded urban rivers and related resources. In agreeing to implement the MOU, the EPA and USACE will use their existing statutory and regulatory authorities in a coordinated manner. These authorities for EPA include CERCLA, the Clean Water Act, and the Resource Conservation and Recovery Act. The USACE's authority stems from the Water Resources Development Act ("WRDA"). WRDA allows for the use of some federal funds to pay for a portion of the USACE's approved projects related to ecosystem restoration.

For the first phase of the Lower Passaic River Restoration Project, the governmental partners are proceeding with an integrated five- to seven-year study to determine an appropriate remediation and restoration plan for the river. The study will involve investigation of environmental impacts and pollution sources, as well as evaluation of alternative actions, leading to recommendations of environmental remediation and restoration activities. The study is being conducted pursuant to CERCLA and WRDA.

Based on information that EPA evaluated during the course of its investigation of the Site, EPA believes that hazardous substances were released from the former Wallace & Tiernan facility located at 25 Main Street in Belleville, New Jersey, into the Lower Passaic River Study Area. Hazardous substances, pollutants and contaminants released from the facility into the river present a risk to the environment and the humans who may ingest contaminated fish and shellfish. Therefore, Arkema Incorporated may be potentially liable for response costs which the government may incur relating to the study of the Lower Passaic River. In addition, responsible parties may be required to pay damages for injury to, destruction of, or loss of natural resources, including the cost of assessing such damages.

EPA is aware that the financial ability of some PRPs to contribute toward the payment of response costs at the Site may be substantially limited. If you believe, and can document, that you fall within that category, please inform Ms. Reddy and Mr. Hyatt in writing at the addresses identified in this letter. You will be asked to submit financial records including federal income tax returns as well as audited financial statements to substantiate such a claim.

Please note that, because EPA has a potential claim against you, you must include EPA as a creditor if you file for bankruptcy. You are also requested to preserve and retain any documents now in your Company's or its agents' possession or control, that relate in any manner to your facility or the Site or to the liability of any person under CERCLA for response actions or response costs at or in connection with the facility or the Site, regardless of any corporate document retention policy to the contrary.

Enclosed is a list of the other PRPs who have received Notice letters. This list represents EPA's

findings on the identities of PRPs to date. We are continuing efforts to locate additional PRPs who have released hazardous substances, directly or indirectly, into the Lower Passaic River Study Area. Exclusion from the list does not constitute a final determination by EPA concerning the liability of any party for the release or threat of release of hazardous substances at the Site. Be advised that notice of your potential liability at the Site may be forwarded to all parties on this list as well as to the Natural Resource Trustees.

We request that you become a "cooperating party" for the Lower Passaic River Restoration Project. As a cooperating party, you, along with many other such parties, will be expected to fund the CERCLA study. Upon completion of the study, it is expected that CERCLA and WRDA processes will be used to identify the required remediation and restoration programs, as well as the assignment of remediation and restoration costs. At this time, the commitments of the cooperating parties will apply only to the study. For those who choose not to cooperate, EPA may apply the CERCLA enforcement process, pursuant to Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §9606(a) and §9607(a) and other laws.

You may become a cooperating party by participating in the Cooperating Parties Group ("Group") that has already formed to fund the CERCLA study portion of the Lower Passaic River Restoration Project.

We strongly encourage you to contact the Group to discuss your participation. You may do so by contacting:

William H. Hyatt, Esq.
Common Counsel for the Lower Passaic River Study Area Cooperating Parties Group
Kirkpatrick & Lockhart LLP
One Newark Center, 10th Floor
Newark, New Jersey 07102
(973) 848-4045
whyatt@kl.com

Written notification should be provided to EPA and Mr. Hyatt documenting your intention to join the Group and settle with EPA no later than 30 calendar days from your receipt of this letter. The result of any agreement between EPA and your Company as part of the Group will need to be memorialized in an Administrative Order on Consent. EPA's written notification should be mailed to:

Kedari Reddy, Assistant Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency
290 Broadway - 17th Floor
New York, New York 10007-1866

Pursuant to CERCLA Section 113(k), EPA must establish an administrative record that contains documents that form the basis of EPA's decision on the selection of a response action for a site. The administrative record files along with the Site file are located at EPA's Region 2 office located at 290 Broadway, New York, NY on the 18th floor. You may call the Records Center at (212) 637-4308 to make an appointment to view the administrative record and/or the Site file for the Diamond Alkali Site, Passaic River.

As you may be aware, the Superfund Small Business Liability Relief and Brownfields Revitalization Act became effective on January 11, 2002. This Act contains several exemptions and defenses to CERCLA liability, which we suggest that all parties evaluate. You may obtain a copy of the law via the Internet at http://www.epa.gov/swerosps/bf/sblrbra.htm and review EPA guidances regarding these exemptions at http://www.epa.gov/compliance/resources/policies/cleanup/superfund.

Inquiries by counsel or inquiries of a legal nature should be directed to Ms. Reddy at (212) 637-3106. Questions of a technical nature should be directed to Elizabeth Butler, Remedial Project Manager, at (212) 637-4396.

Sincerely yours,

Raymond Basso

Ray Basso, Strategic Integration Manager
Emergency and Remedial Response Division

Enclosure 12-05

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

DEC - 8 2005

GENERAL NOTICE LETTER
URGENT LEGAL MATTER
PROMPT REPLY NECESSARY
CERTIFIED MAIL-RETURN RECEIPT REQUESTED

President/Legal Officer
US Filter/Wallace & Tiernan, Inc.
1901 West Garden Road
Vineland, New Jersey 08360

RE: Diamond Alkali Superfund Site
Notice of Potential Liability for
Response Actions in the Lower Passaic River Study Area, New Jersey

Dear Sir/Madam:

The United States Environmental Protection Agency ("EPA") is charged with responding to the release and/or threatened release of hazardous substances, pollutants, and contaminants into the environment and with enforcement responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §9601 et seq. Accordingly, EPA is seeking your cooperation in an innovative approach to environmental remediation and restoration activities for the Lower Passaic River.

EPA has documented the release or threatened release of hazardous substances, pollutants and contaminants into the six-mile stretch of the river, known as the Passaic River Study Area, which is part of the Diamond Alkali Superfund Site ("Site") located in Newark, New Jersey. Based on the results of previous CERCLA remedial investigation activities and other environmental studies, including a reconnaissance study of the Passaic River conducted by the United States Army Corps of Engineers ("USACE"), EPA has further determined that contaminated sediments and other potential sources of hazardous substances exist along the entire 17-mile tidal reach of the Lower Passaic River. Thus, EPA has decided to expand the area of study to include the entire Lower Passaic River and its tributaries from Dundee Dam to Newark Bay ("Lower Passaic River Study Area").

By this letter, EPA is notifying US Filter/Wallace & Tiernan, Inc. of its potential liability relating to the Site pursuant to Section 107(a) of CERCLA, 42 U.S.C. §9607(a). Under CERCLA, potentially responsible parties ("PRPs") include current and past owners and operators of a facility, as well as persons who arranged for the disposal or treatment of hazardous substances at the Site, or the transport of hazardous substances to the Site.

In recognition of our complementary roles, EPA has formed a partnership with USACE and the New Jersey Department of Transportation-Office of Maritime Resources ("OMR") ["the governmental partnership"] to identify and to address water quality improvement, remediation, and restoration opportunities in the 17-mile Lower Passaic River. This governmental partnership is consistent with a national Memorandum of Understanding ("MOU") executed on July 2, 2002 between EPA and USACE. This MOU calls for the two agencies to cooperate, where appropriate, on environmental remediation and restoration of degraded urban rivers and related resources. In agreeing to implement the MOU, the EPA and USACE will use their existing statutory and regulatory authorities in a coordinated manner. These authorities for EPA include CERCLA, the Clean Water Act, and the Resource Conservation and Recovery Act. The USACE's authority stems from the Water Resources Development Act ("WRDA"). WRDA allows for the use of some federal funds to pay for a portion of the USACE's approved projects related to ecosystem restoration.

For the first phase of the Lower Passaic River Restoration Project, the governmental partners are proceeding with an integrated five- to seven-year study to determine an appropriate remediation and restoration plan for the river. The study will involve investigation of environmental impacts and pollution sources, as well as evaluation of alternative actions, leading to recommendations of environmental remediation and restoration activities. The study is being conducted pursuant to CERCLA and WRDA.

Based on information that EPA evaluated during the course of its investigation of the Site, EPA believes that hazardous substances were released from the former Wallace & Tiernan facility located at 25 Main Street in Belleville, New Jersey, into the Lower Passaic River Study Area. Hazardous substances, pollutants and contaminants released from the facility into the river present a risk to the environment and the humans who may ingest contaminated fish and shellfish. Therefore, US Filter/Wallace & Tiernan, Inc. may be potentially liable for response costs which the government may incur relating to the study of the Lower Passaic River. In addition, responsible parties may be required to pay damages for injury to, destruction of, or loss of natural resources, including the cost of assessing such damages.

EPA is aware that the financial ability of some PRPs to contribute toward the payment of response costs at the Site may be substantially limited. If you believe, and can document, that you fall within that category, please inform Ms. Reddy and Mr. Hyatt in writing at the addresses identified in this letter. You will be asked to submit financial records including federal income tax returns as well as audited financial statements to substantiate such a claim.

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We request that you become a "cooperating party" for the Lower Passaic River Restoration Project. As a cooperating party, you, along with many other such parties, will be expected to fund the CERCLA study. Upon completion of the study, it is expected that CERCLA and WRDA processes will be used to identify the required remediation and restoration programs, as well as the assignment of remediation and restoration costs. At this time, the commitments of the cooperating parties will apply only to the study. For those who choose not to cooperate, EPA may apply the CERCLA enforcement process, pursuant to Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §9606(a) and §9607(a) and other laws.

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Sincerely yours,

Raymond Basso

Ray Basso, Strategic Integration Manager
Emergency and Remedial Response Division

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