PRELIMINARY SITE ASSESSMENT ADDITIONAL INVESTIGATION AND REMEDIAL MEASURES PROGRAM

FMC CORPORATION PEROXYGEN CHEMICALS DIVISION TONAWANDA, NEW YORK SITE SITE NO. 915025

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EXECUTIVE SUMMARY

FMC Corporation (FMC) has entered into an Order on Consent (Index #B9-0431-93-06), effective November 22, 1993, with the New York State Department of Environmental Conservation (NYSDEC) to perform a Preliminary Site Assessment (PSA) at FMC's Peroxygen Chemicals Division manufacturing facility located at 37 Sawyer Avenue in Tonawanda, New York (NYSDEC Site No. 915025). Approximately 100 tons of plant waste materials were reportedly disposed of over a twelve year period (from 1964 to 1976) in two to four pits located along the southwestern portion of the plant property. Woodward-Clyde Consultants (WCC) was retained to assist FMC in performance of the PSA.

Commencing with the January 1994 Records Search, investigatory work consistent with the requirements of the Order have been conducted by FMC. Investigative field work has included two phases of sampling and analysis. The first phase conducted in September 1994 as part of the initial PSA investigation concluded that:

1. Evidence of disposal of plant manufacturing waste was limited to two small areas, identified as Locations A and D on Site-1.

2. No samples collected during the initial PSA field work exhibited any hazardous waste characteristics. Field tests indicated that oxidizers, the primary plant waste, were not present, confirming that disposed oxidizing materials had decomposed into innocuous salts.

3. PCBs were detected in waste samples collected from test pits at Locations A and D. The PCB concentration from the waste sample from Location A at 16,000 ppm was above the New York hazardous waste criterion of 50 ppm.

Based on the results of the initial PSA investigation, a second phase of sampling and analysis was conducted in July and August 1995 to characterize the horizontal and vertical extent of PCB concentrations at Locations A and D. Based on the results from this sampling phase, excavation of surface and subsurface soils having PCB concentrations above NYSDEC clean-up criteria (1 ppm surface, 10 ppm subsurface) was undertaken at Locations A and D.

Remedial measure activities were conducted at these locations from October 10 through October 26, 1995. In all, approximately 285 cubic yards of material including soil and wastes were removed from Locations A and D. No plant wastes were observed at the base or walls upon final excavation margins at either of Locations A and D. Evidence of plant rubble and flyash mixed with clay were observed at the final clean margin at the east wall of Location D. Laboratory analyses of composite samples collected from the base, sidewalls and surrounding surface margins of excavations at both Locations A and D met the applicable clean-up criteria (less than 1 ppm PCBs in surface soils and 10 ppm in subsurface soils). Additionally, the excavations at Locations A and D were backfilled and roughly graded with clean imported fill obtained from Integrated Waste Special Services (IWSS), providing a one-foot clean soil cover in all remediated areas.

In summary, PCB contamination on FMC property identified as Site-1, has been remediated in accordance with New York State DEC approved measures and, as such, this area does not constitute a threat to public health or environment. Moreover, the only hazardous waste discovered at the site, soils containing PCBs in excess of the New York State criterion of 50 ppm, has been completely removed. No evidence of any other hazardous waste at the FMC Site (either Site-1 or Site-2) was discovered during the PSA. Therefore, no additional investigatory or remedial work is required, and the site should be delisted from the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

1.0 INTRODUCTION

FMC Corporation (FMC) has entered into an Order on Consent (Index #B9-0431-93-06), effective November 22, 1993, with the New York State Department of Environmental Conservation (NYSDEC) to perform a Preliminary Site Assessment (PSA) at FMC's Peroxygen Chemicals Division manufacturing facility located at 37 Sawyer Avenue in Tonawanda, New York (NYSDEC Site No. 915025). Approximately 100 tons of plant waste materials were reportedly disposed of over a twelve year period (from 1964 to 1976) in two to four pits located along the southwestern portion of the plant property. Woodward-Clyde Consultants (WCC) was retained to assist FMC in performance of the PSA.

In accordance with the terms and provisions of the Order, FMC submitted a Work Plan for conducting a PSA Investigation to the NYSDEC on January 21, 1994. A revised work plan reflecting NYSDEC comments was submitted on May 11, 1994. An addendum to this Work Plan was submitted July 14, 1994, responding to the final NYSDEC comment letter of June 28, 1994. The Work Plan, with the Addendum, was approved by NYSDEC in a letter dated August 12, 1994.

In September 1994, field work for the PSA was completed. Work performed included sampling and analyses of select soil and waste samples from excavated test pits within Site-1 and Site-2 located on FMC property. During the PSA field work, waste samples from two areas of Site-1 (Locations A and D) exhibited detections of polychlorinated biphenyls (PCBs). No other compounds of concern were reported during the initial PSA investigation. A PSA report was submitted to NYSDEC on January 19, 1995. Section 7.0 of this report included a recommendation that an additional investigation be conducted to characterize the horizontal and vertical extent of PCBs at Locations A and D on Site-1. NYSDEC comments on the PSA report were received on February 28, 1995. At a March 21, 1995 meeting, agreements between FMC and NYSDEC were made concerning NYSDEC's comment letter on the PSA report and recommended additional investigation. An April 13, 1995 letter from FMC to NYSDEC summarized agreements made and together with Section 7.0 of the PSA report, was considered the scope of work for what was identified as the Additional Investigation.

Between July 27, 1995 and August 15, 1995, field activities for the Additional Investigation were completed. Due to a fire at FMC's warehouse facility on August 18, 1995, earth moving equipment and remediation personnel were on-site, and FMC requested permission to proceed with remediation of the PCB contaminated soil while equipment was mobilized at the site. On August 24, 1995, a meeting between FMC and NYSDEC was held to discuss and agree upon remedial measures to be conducted at Locations A and D. At the meeting, NYSDEC was presented with figures and available data from the Additional Investigation which delineated surface and subsurface soil PCB concentrations and the expected extent of remediation required at the two locations. On August 28, 1995, a letter from NYSDEC to FMC summarized discussions and agreements made at the August 24, 1995 meeting and requested a brief project operations plan that described the proposed remedial actions. On September 22, 1995, an Interim Remedial Measures - Project Operations Plan was submitted to NYSDEC. Verbal approval by NYSDEC to proceed had been given at the August 24, 1995 meeting. On October 25, 1995, FMC received formal approval of the Interim Remediation Measures - Project Operations Plan, as submitted.

Remedial measures activities between October 10 and October 26, 1995 included field and laboratory PCB testing, excavation of soils and miscellaneous waste materials exceeding PCB action levels, backfilling excavations with clean soil, and rough grading of backfilled soil. Clean backfill soil was obtained from the remedial contractor, Integrated Waste Special Services (IWSS). Final grading will most likely occur during the spring of 1996 during drier weather.

This report describes the Additional Investigation performed at the FMC facility in accordance with Section 7.0 of the PSA report and the April 13 letter from FMC to NYSDEC, and the Remedial Measures performed in accordance with the Project Operations Plan.

The subsequent sections of this report present:

- The objectives of the Additional Investigation and Remedial Measures (Section 2.0).
- Site background information (Section 3.0).
- A summary of sampling methods, locations and analytical procedures used during the Additional Investigation, as well as analytical results, conclusions and recommendations based on the findings (Section 4.0).

- An overview of the Remedial Measures performed. This includes excavation methods employed, sampling methods and locations, sampling results, soil volumes removed, and backfilling and grading performed (Section 5.0).
- Conclusions and recommendations (Section 6.0), including a recommendation for delisting the site.
- A certification that work was performed in accordance with the approved Scope of Work (Section 7.0).

2.0 OBJECTIVES

As set forth in the Order, the objectives of the PSA investigation are to gather data to enable the Department to (1) determine whether hazardous waste is presents at the site; and (2) if hazardous waste is present, characterize the nature of such wastes and determine whether they constitute a threat to public health or the environment.

During the initial PSA investigation, samples of plant wastes did not exhibit any hazardous waste characteristics. However, PCB concentrations in waste samples collected within Location A on Site-1 were above the New York State hazardous waste criterion (50 ppm). PCBs were also detected at Location D, at concentrations below 50 ppm. The initial PSA investigation did not include testing for PCBs in soils underlying the waste disposal pits and test trench excavations did not delineate the extent of apparent waste present to the south and east of Locations A and D. The objective of the Additional Investigation was to characterize the vertical and horizontal extent of PCB concentrations at these locations.

The objectives of the Remedial Measures Program were to (1) remove surface and subsurface soils from Locations A and D having PCB concentrations above NYSDEC clean-up criteria of 1 ppm and 10 ppm in surface and subsurface soils, respectively; (2) remove such material to a secure landfill; and (3) restore the site to its approximate initial condition. The overall objectives of both the Additional Investigation and Remedial Measures Program is the delisting of Site-1 from the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

3.0 BACKGROUND

3.1 SITE SETTING

The FMC Facility is located at the corner of Sawyer Avenue and River Road in the Town of Tonawanda, Erie County, New York. A site location map is provided as Figure 3-1. The facility is situated in a heavily industrialized area of Tonawanda, New York between Interstate 190 and the Niagara River. The river is approximately 1,800 feet west of the FMC Plant.

On January 6, 1994, FMC submitted to NYSDEC a report of a "Records Search" concerning the history of potential hazardous waste disposal at the facility. Information obtained during this "Records Search" identified two locations on FMC property known as Site-1 and Site-2, where waste disposal activities most likely occurred until approximately 1976. These disposal areas were reportedly covered with clay. Field work conducted during 1994 as part of the PSA investigation focused on both locations as potential sources of waste disposal.

Site-1 is an approximately 1-acre parcel of land owned by FMC, located south of the current paved plant parking lot. Prior to remedial measures activities, the area was covered with gravel placed over thin plastic sheeting. Site-1 is bounded by the FMC plant to the east, the plant parking lot to the North, Site-2 to the west, and a Niagara Mohawk rail spur and coal unloading area to the south.

Figure 3-2 illustrates the major features of the area of investigation, and surface water drainage pathways. The surface topography of Site-1 slopes gently to the north and west. The land surface along the western fence line of Site-1 is approximately 1 to 2 feet higher than the adjacent portion of Site-2. Based on the site topography, surface water runoff likely flows toward Site-2. A sewer line crosses Site-1. The approximate location of the sewer line is shown on Figure 3-2. There are no surface water bodies on Site-1.

Site-2 is an approximately three acre parcel, owned by FMC, located west of the plant parking lot. Site-2 is currently level and grassed. Site-2 is bordered by Site-1 and the plant parking lot to the east, Sawyer Avenue to the north, River Road (and Niagara Mohawk's Huntley Station) to the west, and the Niagara Mohawk rail spur to the south.

Site-2 is relatively flat. Surface drainage ditches are present along the northern boundary of the parcel, adjacent to Sawyer Avenue, and the western boundary, adjacent to River Road. These ditches would receive surface water runoff from Site-2. Some surface water drainage may also occur at the southern boundary of Site-1 and Site-2, along the Niagara Mohawk rail spur. Sewer lines and raw water supply lines run under Site-2, as shown on Figure 3-2. There are no surface water bodies on Site-2.

Both sites are underlain, at depths ranging from 1/2 foot to 8 feet, by a stiff lacustrine clay with very low permeabilities. This clay reportedly extends to depths of 25 feet to 58 feet. Some isolated pockets of perched water are associated with crushed stone/brick rubble fill in the two areas, but no evidence of a continuous shallow groundwater zone has been discovered.

Additional supporting documentation on site history and geology/hydrogeology is presented in the PSA report (January 1995).

3.2 RESULTS OF 1994 PSA PREVIOUS INVESTIGATION

As previously noted, WCC completed a review of the history of disposal of potentially hazardous wastes at the FMC facility that was presented in the report to NYSDEC titled "Preliminary Site Assessment, Report of Records Search" (January 6, 1994). In general, this report concluded that wastes reportedly disposed of on-site were primarily composed of plant products which did not include listed hazardous waste based on present RCRA or NYSDEC hazardous waste regulations. Under present regulatory provisions, some waste materials may have exhibited the characteristics of ignitability at the time of disposal. However, due to rapid degradation rates of these chemicals (mainly persulfates and peroxide salts), which are strong oxidizers, it was concluded that products disposed of on-site had degraded into innocuous salts over time and would therefore no longer exhibit the characteristic of ignitability. Though waste and fill material were placed extensively into areas of Site-1 and Site-2, there were primarily four disposal pits in Site-1 which received plant wastes other than construction debris, rubble, or other innocuous fill. These four disposal pits were reported to contain product residue, small amounts of paint waste, oily rags and floor sweepings. Through employee interviews and historic aerial photograph examinations, WCC identified nine suspected disposal pit locations in Site-1 and Site-2.

In September 1994, WCC began an investigation into these nine locations (identified as Locations A through I), by excavating a series of test pits to the native clay horizon. Seventy-five test pits were excavated. Evidence of disposal of plant manufacturing wastes was encountered at only two of the nine locations (Locations A and D), both located along the southern property line in Site-1. The approximate extent of waste to the west and north of these disposal pits was determined by observations during test pit excavations. None of the waste samples collected for analysis exhibited a hazardous waste characteristic. All field tests for the presence of oxidizers, the primary plant waste, were negative. All TCLP results were below regulatory criteria for hazardous waste. No semi-volatile organics representative of plant wastes were reported in apparent waste materials.

The PCB concentration in the sample from Location A on Site-1 at 16,000 ppm, was well above the NYS hazardous waste criterion (50 ppm). The source of PCBs at this location is unknown, nor was the extent of PCB contamination determined by this investigation. PCBs were also detected on Site-1 at Location D, though at a much lower concentration (total PCB concentrations from replicate analyses were 14.1 ppm and 27 ppm).

Permeability and grain-size distribution analysis of native clay samples underlying Site-1 and Site-2 reported low permeabilities in the range of 2×10^{-7} to 1×10^{-6} cm/sec. The native clay was found under all test pits excavated at depths ranging from 2 to 7 feet below ground surface.

Analysis of native clay samples underlying waste disposal pits did not indicate any significant migration of contaminants from the waste. Only traces (less than 0.2 mg/kg) of volatile organic compounds were detected. No semi-volatile organics were detected. Reported metal concentrations were typical of background.

The PSA report concluded that based upon the low permeability of the native clay underlying the site, the low concentration of constituents found in soil directly underlying the waste disposal pits and the low mobility of PCBs, there was no potential of groundwater contamination due to past waste disposal practices at the site. The 1994 PSA investigation did not include testing for PCBs in soils underlying the waste disposal pits, and test trench excavations did not delineate the extent of apparent waste present to the south and east of Locations A and D. The PSA report further recommended an Additional Investigation to

better delineate the horizontal and vertical extent of PCB contamination in Locations A and D and surrounding areas by means of a grid pattern of soil borings. No chemicals other than PCBs required further investigation or remediation based upon the initial PSA investigation.

4.0 ADDITIONAL INVESTIGATION

To determine the horizontal extent of PCB contamination in apparent waste materials above the clay layer, soil borings were advanced on a grid of approximately 25-foot centers consisting of three columns (designated X, Y and Z from north to south) and eight rows (designated 1 through 8 from east to west), overlain over Locations A and D and the area between them. Figure 4-1 shows the orientation of this grid and the locations of test pits excavated during the initial investigation. Each grid node represents a boring location. An additional four borings were advanced approximately 12 feet near the center of Location A (corresponding to grid node "Y7") to better delineate the horizontal extent of PCB contamination in this area. In addition, four more borings were advanced (two in Location A and two in Location D) to determine whether PCB contamination has penetrated the native clay underlying the pits. For each location, one boring was performed in the approximate area where PCBs were detected during the initial PSA investigation, and one boring in the approximate center of the disposal pit, based on the data collected to date. Each of these four vertical borings extended two feet into the underlying native clay. Surface soil samples were also collected, with subsequent analyses required for selected samples in areas where subsurface PCB concentrations exceeded 10 ppm. Section 7.0 of the PSA report (January 1995) presents a more comprehensive description of the proposed scope of work.

4.1 SCOPE OF WORK

Field work was completed in accordance with the approved Work Plan. Figure 4-1 illustrates locations of borings advanced during the Additional Investigation. As shown on Figure 4-1 sample location designations were referenced to the 3 column, 8 row grid set up over the two former disposal pit areas (Locations A and D). The long axis of the grid runs roughly parallel to the fence and boundary separating FMC and Niagara Mohawk. During field work, this fence/boundary was interpreted to run in a north-south direction, with north being toward River Road and the Niagara Mohawk Power generating plant. This direction is actually approximately west-northwest. The samples from borings surrounding former Test Pit A-5 were labeled based on this assumption. As such, borings and corresponding samples were identified as A5S (south), A5N (north), A5SE (southeast), etc. This sample designation scheme carried over into the remediation phase of the field work (Section 5.0) so that

excavation sites were named according to their orientation to the fence and not to a strictly true north direction. Horizontal delineation borings advanced around former Test Pit A-5 (grid location Y7) were prefixed "A5".

Following execution of an access agreement to drill on Niagara Mohawk Property, on July 27, 1995, the 24 node grid boring locations were staked out over the site and advancement of borings commenced. A small portion of the fence separating FMC and Niagara Mohawk property was removed and the drill rig was moved onto Niagara Mohawk property. Drilling services were provided by Nothnagle Drilling of Scottsville, New York. Borings on Niagara Mohawk property (Z2 to Z8) were advanced first to establish the limits of PCB contamination beyond the FMC property line.

In a February 28, 1995 letter from NYSDEC to FMC approving the Work Plan, NYSDEC requested four additional borings, one in Site-1 and three in Site-2. These four locations were the C-4 test pit in Site-1 (which was already on the grid as boring location X3), a boring in the center of location H in Site-2 (designated boring HB), a boring in the center of Location I in Site-2 (designated boring IB), and a boring from Test Pit E-5 in location E at Site-2 (designated boring EB). These four borings were advanced after the Niagara Mohawk property borings. Samples from this first day of field activities were shipped that evening to Nytest Environmental Laboratories of Port Washington, New York, with instructions for 24-hour turnaround time for analyses.

The remaining borings were subsequently advanced in accordance with the plan. Based on field observations, one additional boring (Boring A5SE on Figure 4-1) was advanced in Location A to better delineate the potential extent of waste material in this area.

Surface soil samples from undisturbed portions of the clay cap (encountered over disposal areas) were collected from the same approximate locations as the soil borings. The majority of surface samples were collected during boring activities; however, a number were also collected the following week.

Soil and waste/fill samples collected for laboratory analysis were generally obtained from the split spoon which exhibited the most evidence of fill/waste materials or visual contamination (if any) at each boring location. If waste or fill or evidence of visual contamination was not

present, the sample for PCB analysis was collected from the split spoon immediately above the native clay layer. An organic vapor analyzer (OVA) was used to screen samples from each split spoon. With the exception of samples from three split spoons with low responses (1/2 ppm to 2 ppm), there was no response from the instrument on the majority of samples screened with the OVA.

Four soil borings, two for Location A and two for Location D, for vertical delineation of PCB contamination, were advanced to the top of the clay layer and then an additional two feet into the clay. These included borings A5N and Y7 in Location A, and borings D4 and Y4C in Location D. The first six inches of native clay from these borings were sampled and submitted for PCB analysis. The 6 to 12 inch and 18 to 24 inch intervals were also sampled and archived in case the 0 to 6 inch interval yielded PCB concentrations above 10 ppm.

Surface soil samples from the undisturbed clay cap were collected at locations as close as possible to each corresponding boring, generally within one foot. In several cases where borings were advanced through former test pits (X3, Y7, A5E), the clay was disturbed; therefore, the surface/clay cap samples were collected up to two feet away from corresponding borings. For all subsurface samples which had PCB concentrations greater than 10 ppm, the corresponding surface soil sample was also submitted for PCBs analysis.

4.2 METHODS

All subsurface samples were collected from decontaminated stainless steel split spoons driven ahead of the augers. The decontamination procedure included washing with non-phosphate detergent and potable water, followed by a potable water rinse, a deionized water rinse, a hexane rinse, a second de-ionized water rinse, and air drying. Samples collected from split spoons were removed onto clean plastic sheeting. The outer surface of the sample was scrapped off, if possible, with a decontaminated stainless steel knife. The sample was then put into a decontaminated stainless steel mixing bowl and composited if more than one horizon from a single split spoon was sampled. The sample was placed into laboratory supplied glassware, refrigerated and submitted to the laboratory within 24 hours of sample collection.
For surface soils, all sampling equipment (stainless steel bowls, trowels, spoons) were decontaminated in the same manner as the split spoons. Surface soil samples were obtained by digging through the gravel surface to the black plastic sheeting overlying the clay cap. The

plastic was then cut away and the trowel was used to dig down three to four inches into the clay cap. Another trowel was then used to collect the clay sample into laboratory supplied glassware. These were kept refrigerated until determination could be made as to whether PCB analyses were required, based on results of corresponding subsurface samples.

All subsurface samples submitted to the contract laboratory, Nytest Environmental of Port Washington, New York, were analyzed for PCBs by EPA Method 8080. Thirty eight subsurface soil samples were submitted for analysis. This number included two field duplicates: T1, a duplicate of sample Z1, and U1, a duplicate of sample A5S. In addition, extra sample volume was collected at borings Y4 and X8 to enable the laboratory to analyze quality control samples. Two rinsate blanks (RSB-1 and RSB-2) were also collected during subsurface sample collection activities. The collection of these involved pouring one liter of laboratory-supplied analyte-free deionized water through a decontaminated split spoon and into a one liter amber glass bottle. Rinsate blanks were collected on July 28 and July 31, 1995.

For surface soil samples, a field duplicate of sample A5ES was submitted (V1) along with a rinsate blank (RSB-3). The rinsate blank was prepared by pouring a liter of laboratory supplied analyte-free deionized water into a decontaminated stainless steel bowl and then transferring the water into a one liter amber glass sample bottle.

4.3 FIELD OBSERVATIONS

A total of 29 horizontal delineation borings were advanced at Site-1 over the area of the former waste disposal pits.

For Site-1, native clay was generally encountered at an average depth of five feet, with a range of from two to eight feet bgs. Most borings in Site-1 revealed fill materials such as reworked clay, clay stained with fly ash and brick fragments. Minor amounts of gravel and sand were also brought to surface. Actual plant waste/disposal pit materials were seldom recovered from the split spoons. Appendix A contains boring logs for borings advanced during the Additional Investigation. The logs contain information on the depth to native clay, the materials above clay and the approximate depth at which analytical samples were collected for each boring. OVA response (if any) and recoveries for each split spoon are also presented

in the boring logs. Chemical odors that emanated from the excavation of Test Pit A-5 during the 1994 PSA investigation were not detected from any split spoon samples from borings advanced around this location.

The three borings on Site-2 (HB, EB, IB) also had an average depth to native clay of five feet, with a range of four to seven feet. Most of the material observed in the split spoons of these three widely separated borings was reworked clay fill with occasional brick fragments (Location H), gravel and minor glass (Location E) and flyash (Location I). Logs of these borings are also included in Appendix A.

4.4 ANALYTICAL RESULTS

PCB results for all soil samples collected during the Additional Investigation are summarized in Table 4-1. Figure 4-2 presents subsurface total PCB concentrations reported during the Additional Investigation. Figure 4-3 presents the subsurface and surface soil total PCB concentrations at Location A.

4.4.1 Subsurface Soil

Subsurface soil samples collected across the established grid (see Figure 4-2) had PCB concentrations for the most part below 2 ppm. Exceptions included samples from borings X8, Y4, Y6, A5E, A5S, and A5SE. Only samples from Location A - Y6 (11 ppm), A5E (60 ppm), A5S (2,100 ppm and 23,000 ppm, replicate samples), and A5SE (16 ppm) - had PCB concentrations above the NYSDEC subsurface soil clean-up criterion. No subsurface samples from the vicinity of Location D had PCB concentrations above 10 ppm. No PCBs were detected in the three Site-2 borings (HB, EB, IB) at detection levels well below the clean-up criterion.

No PCBs were detected in the 6 inches of native clay in three of the four vertical delineation boring samples (Y4C, D4, A5NA). The fourth, Y7A, located beneath Test Pit A-5, had a PCB concentration of 2 ppm, which is well below the NYSDEC subsurface soil clean-up criterion of 10 ppm.

Field replicate subsurface soil samples Z1 and T1 PCB concentrations compared favorably at 1.9 ppm and 1.0 ppm, respectively. Field replicate subsurface soil sample PCB concentrations for A5S and U1 differed by approximately one order of magnitude (A5S at 2,100 ppm and U1 at 23,000 ppm). The discrepancies may be attributable to the heterogeneity of the sample matrix.

4.4.2 Surface Soil

For each subsurface soil sample result that was reported at greater than 10 ppm, the corresponding surface soil sample was submitted for PCB analysis at a detection level below the NYSDEC surface soil clean-up criterion. These surface samples were Y6S (S = surface), A5SS, A5ES and A5SES. In addition, all other surface samples in the vicinity of former Test Pit A-5 were analyzed for PCBs to better delineate surface soil contamination from PCBs in this area. These included samples Y7S, A5NS, A5WS, X6S, Z6S and X7S.

Four of the ten surface samples analyzed had PCB concentrations greater than 1 ppm, these included samples Y6S (2.8 ppm), Y7S (86 ppm), A5SS (1.5 ppm) and A5SES (1.4 ppm); locations and PCB concentrations of these samples are shown on Figures 4-3.

Copies of laboratory data summary forms (Form-1s) are included in Appendix B. All analytical data generated during the Additional Investigation were subjected to a data quality review. The results of the data quality review are discussed in Appendix C, and appropriate data qualifiers have been incorporated into the data summary tables in this report. The overall conclusion of the data quality review was that the data reported were acceptable for their intended use, with minor qualification. No contamination was detected in equipment blanks. Acceptable precision was achieved in analyses of field replicate samples except where noted. Additional details concerning the data quality review can be found in Appendix C.

4.5 CONCLUSIONS AND RECOMMENDATIONS - ADDITIONAL INVESTIGATION

The following conclusions were developed based upon the analytical results and field observations obtained from the initial PSA investigation and Additional Investigation:

1. Soil PCB concentrations exceeding NYSDEC's 10 ppm clean-up criterion for subsurface soils are limited to the immediate vicinity of Test Pit A-5 and Test Pit D-4. Waste/fill material during the initial PSA investigation yielded concentrations of total PCBs at 16,000 ppm in Test Pit A-5 and 14 and 27 ppm from replicate samples of Test Pit D-4. No subsurface soil samples collected during the Additional Investigation from Location D had PCB concentrations above the NYSDEC clean-up criterion. Subsurface soil samples at Location A with PCB concentrations above 10 ppm included: Y6, A5E, A5S, and A5SE.

2. The grid sampling provides a "clean" boundary in subsurface soils around Location A. The approximate area containing PCBs above the clean-up criteria, and the "clean" boundary are illustrated on Figure 4-3.

3. Samples from the clay layer underlying Locations A and D contained low (below 10 ppm) or non-detectable PCB concentrations in the 0 to 6 inch interval; thus, no substantial migration of PCBs into the clay layer was observed.

4. No significant surficial contamination is present beyond the area of subsurface contamination near Test Pit A-5. Four surficial soil samples in the vicinity of Test Pit A-5 had PCB concentrations above 1 ppm. These included samples Y6S, Y7S, A5SS and A5SES. Surficial soils in the vicinity of Test Pit D-4 were not investigated since corresponding subsurface grid samples collected during the Additional Investigation were either non-detected for PCBs or had concentrations below the 10 ppm clean-up criterion.

5. No subsurface and surface soil PCB concentrations above NYSDEC clean-up criteria were detected from other areas on-site, or from the Niagara Mohawk property adjacent to the site.

Two potential excavation scenarios for Location A were discussed with NYSDEC. The initial excavation at Location A would be limited to the immediate vicinity of subsurface samples exceeding the 10 ppm clean-up criterion (Y6, A5SE, A5E, Test Pit A-5 and A5S), the area bound by the red line on Figure 4-3. Conservative limits of remediation were delineated by the "clean" boundary defined by locations X6, X7, A5N, A5W, Z6 and near the vicinity of Y6, the blue line shown on Figure 4-3. At a 6-foot average depth, the impacted volume of excavated material was anticipated to be approximately 100 cubic yards for the "expected case" and approximately 600 cubic yards for the "conservative case". For Location D, excavation was expected to be limited to the immediate vicinity of Test Pit D-4, since no other samples in this area exceeded the 10 ppm criterion. For both locations, the final limits of excavation were to be determined by post-excavation samples.

5.0 REMEDIAL MEASURES

Following a fire at FMC's warehouse facility on August 18, 1995, heavy equipment was brought on-site for clean-up and demolition activities. At this time, FMC deemed it appropriate to conduct remedial measures at areas recommended on Site-1 simultaneously with ongoing remediation efforts at the warehouse.

On August 24, 1995, a meeting between representatives of FMC, WCC and NYSDEC was held at the FMC Tonawanda facility to discuss and agree upon remedial measures to be conducted at Locations A and D. The remedial measures agreed upon included excavation of surface and subsurface soils with PCB concentrations above 1 ppm and 10 ppm, respectively.

Subsequent to this meeting, NYSDEC required FMC to submit an interim remedial measures - project operations plan prior to commencement of remediation efforts on Site-1. This plan, which detailed the scope of work for the remedial measures, was submitted to NYSDEC on September 22, 1995. Per the Project Operations Plan (POP), the approximate limits of excavations at Locations A and D were to be determined in the field based on rapid PCB field screening tests using the immunoassay method, followed by confirmational analyses of samples at a commercial certified laboratory. PCB immunoassay test kits were provided by Ensys Incorporated of North Carolina, and commercial laboratory services for the remedial measures were provided by Recra Environmental (Recra) of Amherst, New York. Excavation services were provided by Great Lakes Contracting, under subcontract to Integrated Waste Special Services (IWSS) of Buffalo, New York.

Verbal approval for the remediation plan at Site-1 was granted by NYSDEC at the August 24, 1995 meeting at FMC. Final approval of the POP was granted on October 25, 1995 (subsequent to the remediation work) in a letter from NYSDEC to FMC.

Remediation work was completed in accordance with the POP, and was subject to periodic inspections by NYSDEC personnel during progress of the field work. During the course of the remedial measures, it became evident that the immunoassay test kits were not suitable for extraction of PCBs from clay material. Numerous false negative field test kit results were observed based on subsequent confirmatory commercial laboratory analyses. The final limits of excavation in all cases, were based on PCB results from the commercial laboratory.

5.1 SCOPE OF WORK

Remediation work consisted of:

- Excavation of surface and subsurface soils from Locations A and D until clean-up criteria were achieved.
- Collection and analysis of confirmatory post-excavation samples.
- Collection of additional pre-excavation surface soil samples.
- Placement of excavated soils in trucks or rolloffs for subsequent offsite disposal.
- Placement of clean fill in the excavations and preliminary regrading of the site.

WCC inspected all on-site activities, and collected and arranged for analyses of confirmatory samples.

5.1.1 Excavation

Soil excavation was performed, primarily using a John Deere track-mounted shovel with an approximate twenty-five foot reach. Excavation was completed in a series of cuts, until confirmatory sampling demonstrated that clean-up criteria were achieved.

The progress of excavation is presented on Figure 5-1 for Location A, and on Figure 5-2 for Location D. The initial excavation at Location A represents the approximate planned excavation area shown by the red line on Figure 4-3. For Location D, the initial excavation represented an approximate 10 foot by 10 foot area at the location of Test Pit D-4. In each case, the depth of excavation was defined by the native clay layer underlying the site.

As shown in Figures 5-1 and 5-2, a number of excavation cuts were required to achieve clean-up criteria, based upon results of post-excavation testing.

By the time the excavations were completed, no plant waste material was evident at the margins of the excavations. Some rubble, and flyash mixed with clay, consistent with fill materials in many areas of the site, were observed at the east wall of the Location D excavation.

During the excavation of Location A, the excavation had extended slightly into an area of subsurface perched water originally noted during the 1994 PSA test pit investigation. This perched water resided in a layer of orange stained slag and cobbles lying on reworked clay, primarily in the area of location H which bordered Location A. The northeast corner of the excavation at Location A had exposed the fringe of this slag and cobble layer, therefore, the perched water drained from a six inch long seep into the Location A excavation to a depth of approximately one foot, primarily in the western portion of the excavation. Mr. J. Hyden of NYSDEC raised the concern that this water could act as a pathway for contaminated sediments still present in the north wall to spread over the (clean) floor of the pit (the still contaminated eastern wall of Location A was not affected). In order to address this concern, great care was taken during further excavation of the north wall so as not to cause slumping of sediments from the wall into standing water at the base of the excavation at Location A. The shovel had an advantageous position for accomplishing this. The operator was able to "peel" away the north wall in layers by pulling material toward him. The wall itself was straight and almost no material came in contact with the water. By extending the shovel slightly outward when native clay had been reached at the excavation base, a berm remained which kept water from the newly exposed wall. This berm and the area below it was subsequently scrapped away. Thus, the potential for recontamination of the excavation base was averted.

5.1.2 Post-Excavation Sampling

After completion of each excavation "cut", surface and subsurface soil samples were collected to determine if clean-up criteria had been achieved. Composite samples (representing three points) were collected from surface and subsurface soil strata along each of the north, south, east and west boundaries of the excavation. Sample designations were as follows: A or D for each location; followed by N, S, E, or W to designate wall side; followed by S if a surface soil; followed by the cut number.

In general, subsurface composite sample locations were taken at the base of the wall near the exposed native clay boundary. Surface (composite) samples were taken by sampling three locations within the clay cap exposed on each wall.

Samples were collected by digging into the exposed face for one or two inches with a decontaminated stainless steel trowel at three (occasionally four) locations and homogenizing the material in a decontaminated stainless steel bowl. Laboratory provided glassware was then filled and a small amount of sample removed for field screening if required.

Initially, field screening for PCBs using the Ensys immunoassay test kit was used to determine the need for additional excavation. If the test kit indicated exceedances of clean-up criteria, additional excavation was performed, without sending a sample for confirmatory laboratory analysis. If the test kit indicated that clean-up criteria had been achieved, the corresponding sample was shipped for confirmatory laboratory analysis. It was subsequently determined that the test kit results were biased low (false negative) for clay samples, and use of the field test was discontinued. Subsequently, laboratory analyses (Method 8080) of each post-excavation sample was performed on an expedited turnaround basis to define final excavation limits. In all cases, final excavation limits were based upon laboratory results.

5.1.3 Additional Surface Soil Sampling

After limits of subsurface soils exceeding the 10 ppm clean-up criteria were achieved, it was determined that the final limits of surface soil excavation could best be achieved by additional pre-excavation testing, since field tests were determined to be ineffective for the clayey surficial materials.

On October 17, 1995, WCC collected a series of surface composite samples taken from the undisturbed clay cap around both excavations at Locations A and D. Each composite represented three to four locations on a line parallel to an excavation sidewall. These samples were collected in a manner analogous to that used for surface post-excavation samples. Three "lines" of samples were collected on the north and south sides of the excavation at Location D and the north, south and west side of the excavation at Location A. The first composite was taken approximately five feet back from the pit sidewall or the edge of the surface area that had already been removed. The second composite was taken five feet beyond the first, and the third taken ten feet beyond the second composite. Sample designations for this series followed the convention AA or DD (for A pit or D pit), followed by the wall direction (N, S, E, W), and by the letter S (for surface) and finally by the number (1,2,3) of the composite sample outward from the excavation. The initial composites around each excavation were requested to be analyzed first (24-hour turnaround time) with subsequent composite sample

analysis dependent on whether the initial composites exceeded the surface soil clean-up criterion of 1 ppm total PCBs.

Surface soil excavations proceeded to the clean limits defined by these additional surface soil samples. All surface soils in the area between Locations A and D exceeded the 1 ppm criterion. Surface soil was removed from this entire area; therefore, no clean surface soil sample was reported south of Location A, or north of Location D, since these areas merged.

5.1.4 Soil Staging and Disposal

Excavated soils were either placed directly into lined dump trailers for off-site disposal, or placed in lined rolloffs which were covered with plastic tarps and staged on site pending off-site disposal. In either case, the excavated soils were transported by Chemical Waste Management (CWM) and Hazmat to CWM's Model City landfill, for disposal in a TSCA approved facility.

5.1.5 Backfill

After review of final excavation limits and test results, and inspection of the excavations, Mr. J. Hyden of NYSDEC gave verbal approval for backfill on October 20, 1995. Clean backfill material was provided by Integrated Waste. Backfill was placed October 21, 1995. Preliminary grading of the site was performed October 26, 1995. Final grading and stone cover could not be completed due to wet conditions. Thus, final restoration of the site was delayed until spring. At this time, a clean soil cover at least one foot thick has been placed over all areas remediated. Only final grading and placement of stone for reuse of these site need to be completed.

5.2 RESULTS

The sequence of excavations at Locations A and D, and associated confirmatory sample location, are illustrated on Figures 5-1 and 5-2. Confirmatory test results are presented on Table 5-1 and Table 5-2. For completeness of data presentation, Table 5-1 presents results of field test kit analyses, where performed. However, all final excavation limits were based on laboratory analyses conducted by Recra.

All laboratory analytical data generated during the Remedial Measures were subjected to a data quality review. The results of the data quality review are discussed in Appendix E. The overall conclusion of the data quality review was that the data reported were acceptable for their intended use, without qualification. No contamination was detected in equipment blanks. Acceptable precision was achieved in analyses of field replicate samples. Additional details concerning the data quality review can be found in Appendix E. Copies of laboratory data summary forms (Form-1s) are included in Appendix D.

As shown on Table 5-1, the clean-up criteria were achieved:

- at the bottom of each excavation,
- in subsurface excavation sidewalls at the north, south, east and west limits of excavations,
- in surface soil in excavation sidewalls north, east and west of Location A, and south, east and west of Location D. The area south of Location A and north of Location D was completely remediated.

5.3 SOIL VOLUME AND DISPOSAL RECORDS

Based on measurements made in the field, the subsurface excavation at Location D covered an area approximately thirteen by twenty six feet. Assuming an average depth of seven feet, this would represent 2,366 cubic feet or 87 cubic yards removed from this area. In addition, an estimated 481 square feet of area from the south and east surface areas of excavation D was removed to an average depth of one foot for an additional 482 cubic feet or 18 cubic yards of soil removed.

The excavation at Location A had a more complicated perimeter. The subsurface excavation had a long axis of approximately thirty six (36) feet (parallel to the fence line) and a maximum width of approximately twenty four (24) feet. The area excavated was estimated to be 760 square feet. At an average depth of 4-1/2 feet, the excavation volume was approximately of 3,420 cubic feet or 127 cubic yards was excavated from Location A proper. Surface soil was scraped to a depth of one foot adjacent to the west, north and east side of the excavation at Location A adding approximately 754 cubic feet (28.0 cubic yards). In addition, the entire surface area between Locations A and D was removed to a depth of one foot. This represents an area of approximately 42 by 16 feet, equivalent to 672 cubic feet (25 cubic yards).

Total soil volume removed is therefore estimated as approximately 285 cubic yards. It was initially estimated that between 100 cubic yards (best case) and 600 cubic yards (worst case) of soil would require excavation.

All excavated soil was disposed of in lined dump trailers or rolloffs which were covered, weighed and transported to CWM's Model City Landfill, a secure hazardous waste disposal facility in Model City, New York. A total of 31 trucks/rolloffs with a combined weight of 510 tons of excavated material were transported from the excavation sites. Appendix F includes waste manifests for soil disposed of off-site.

5.4 BACKFILL AND COVER

The two primary subsurface excavations and all surface scraped areas were filled in on Saturday, October 21, 1995, with clean fill stockpiled on site. Two letters from IWSS to FMC, dated October 4 and October 11, 1995, document the source of this material as clean soil from excavations on Grand Island and in Buffalo (see Appendix G).

Preliminary rough grading took place on Thursday, October 26, 1995 by Carmen M. Pariso Inc., of Tonawanda, New York. Precipitation in the form of rain, had been heavy immediately before and during backfilling of the excavations. The areas above the former excavations were still too soft to support heavy grading equipment. A front end loader was used to redistribute fill materials to insure all remediated areas were covered by a minimum one foot of clean soil. WCC excavated seven holes by hand and recorded depth of cover (greater than or equal to one foot) in all of them. In addition, inspection was made over the perimeter of

6.0 CONCLUSIONS AND RECOMMENDATIONS

Commencing with the January 1994 Records Search, investigatory work consistent with the requirements of the Order have been conducted by FMC. Investigative field work has included two phases of sampling and analysis. The first phase conducted in September 1994 as part of the initial PSA investigation concluded that:

1. Evidence of disposal of plant manufacturing waste was limited to two small areas, identified as Locations A and D on Site-1.

2. No samples collected during the initial PSA field work exhibited any hazardous waste characteristics. Field tests indicated that oxidizers, the primary plant waste, were not present, confirming that disposed oxidizing materials had decomposed into innocuous salts.

3. PCBs were detected in waste samples collected from test pits at Locations A and D. The PCB concentration from the waste sample from Location A at 16,000 ppm was above the New York hazardous waste criterion of 50 ppm.

Based on the results of the initial PSA investigation, a second phase of sampling and analysis was conducted in July and August 1995 to characterize the horizontal and vertical extent of PCB concentrations at Locations A and D. Based on the results from this sampling phase, excavation of surface and subsurface soils having PCB concentrations above NYSDEC clean-up criteria (1 ppm surface, 10 ppm subsurface) was undertaken at Locations A and D.

Remedial measure activities were conducted at these locations from October 10 through October 26, 1995; periodic inspections were performed by NYSDEC representative, Mr. John Hyden. In all, approximately 285 cubic yards of material including soil and wastes were removed from Locations A and D. No plant wastes were observed at the base or walls upon final excavation margins at either of Locations A and D. Evidence of plant rubble and flyash mixed with clay were observed at the final clean margin at the east wall of Location D. Laboratory analyses of composite samples collected from the base, sidewalls and surrounding surface margins of excavations at both Locations A and D met the applicable clean-up criteria (less than 1 ppm PCBs in surface soils and 10 ppm in subsurface soils). Additionally, the

excavations at Locations A and D were backfilled and roughly graded with clean imported fill obtained from IWSS, providing a one-foot clean soil cover in all remediated areas.

In summary, PCB contamination on FMC property identified as Site-1, has been remediated in accordance with New York State DEC approved measures and, as such, this area does not constitute a threat to public health or environment. Moreover, the only hazardous waste discovered at the site, soils containing PCBs in excess of the New York State criterion of 50 ppm, has been completely removed. No evidence of any other hazardous waste at the FMC Site (either Site-1 or Site-2) was discovered during the PSA. Therefore, no additional investigatory or remedial work is required, and the site should be delisted from the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

7.0 CERTIFICATION

Woodward-Clyde Consultants provided full-time inspection of field work, and completed the Additional Investigation and Remedial Measures report in accordance with the provisions of the approved scope of work. Locations and number of borings installed during the Additional Investigation were subject to minor modifications, based on professional judgment and as approved by NYSDEC's representative. During the course of the Remedial Measures Program, it became evident that the field test kit method was not suitable for extraction of PCBs from clay material. As such, excavation limits for the most part, were based on PCB tests performed by the subcontracted laboratory. No other significant deviations from the approved scope of work occurred.

Tables

TABLE 4-1
FMC TONAWANDA FACILITY - ADDITIONAL INVESTIGATION
SOIL BORING AND SURFACE SOIL GRID SAMPLE PCB RESULTS

Sample ID Sample date Units I. SOIL BORING PCB RESULTS	X1 7/28/95 mg/kg	X2 7/28/95 mg/kg	X3 7/27/95 mg/kg	X4 7/28/95 mg/kg	X5 7/28/95 mg/kg	X6 7/31/95 mg/kg	X7 7/31/95 mg/kg	X8 7/31/95 mg/kg
PCBs								
Aroclor - 1016	ND 1.3	ND 1.2	ND 1.3	ND 1.2	ND 1.2	ND 1.4	ND 1.3	ND 1.3
Aroclor - 1221	ND 1.3	ND 1.2	ND 1.3	ND 1.2	ND 1.2	ND 1.4	ND 1.3	ND 1.3
Aroclor - 1232	ND 1.3	ND 1.2	ND 1.3	ND 1.2	ND 1.2	ND 1.4	ND 1.3	ND 1.3
Aroclor - 1242	ND 1.3	ND 1.2	ND 1.3	ND 1.2	ND 1.2	ND 1.4	ND 1.3	ND 1.3
Aroclor - 1248	ND 1.3	ND 1.2	ND 1.3	ND 1.2	ND 1.2	ND 1.4	ND 1.3	ND 1.3
Aroclor - 1254	ND 1.3	ND 1.2	ND 1.3	ND 1.2	ND 1.2	ND 1.4	ND 1.3	ND 1.3
Aroclor - 1260	ND 1.3	ND 1.2	1.1J	ND 1.2	0.5J	ND 1.4	ND 1.3	5.6

Sample ID Sample date Units I. SOIL BORING PCB RESULTS - cont.	Y1 7/28/95 mg/kg	Y2 7/28/95 mg/kg	Y3 7/28/95 mg/kg	Y4 7/28/95 mg/kg	Y5 7/28/95 mg/kg	Y6 7/31/95 mg/kg	Y7 7/31/95 mg/kg	Y8 7/31/95 mg/kg
PCBs								
Aroclor - 1016	ND 1.3	ND 1.4	ND 1.3	ND 1.4	ND 1.2	ND 1.2	ND 1.4	ND 1.3
Aroclor - 1221	ND 1.3	ND 1.4	ND 1.3	ND 1.4	ND 1.2	ND 1.2	ND 1.4	ND 1.3
Aroclor - 1232	ND 1.3	ND 1.4	ND 1.3	ND 1.4	ND 1.2	ND 1.2	ND 1.4	ND 1.3
Aroclor - 1242	ND 1.3	ND 1.4	ND 1.3	ND 1.4	ND 1.2	ND 1.2	ND 1.4	ND 1.3
Aroclor - 1248	ND 1.3	ND 1.4	ND 1.3	ND 1.4	ND 1.2	ND 1.2	ND 1.4	ND 1.3
Aroclor - 1254	ND 1.3	ND 1.4	ND 1.3	ND 1.4	ND 1.2	ND 1.2	ND 1.4	ND 1.3
Aroclor - 1260	ND 1.3	ND 1.4	ND 1.3	6.4	ND 1.2	11	0.8	ND 1.3

TABLE 4-1
FMC TONAWANDA FACILITY - ADDITIONAL INVESTIGATION
SOIL BORING AND SURFACE SOIL GRID SAMPLE PCB RESULTS

Sample ID	Z1	Z1 Dup.	Z2	Z3	Z4	Z5	Z6	Z7
Sample date	7/28/95	7/28/95	7/27/95	7/27/95	7/27/95	7/27/95	7/27/95	7/31/95
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
I. SOIL BORING PCB RESULTS - cont.								
PCBs								
Aroclor - 1016	ND 1.3	ND 1.3	ND 1.3	ND 1.4	ND 1.3	ND 1.2	ND 1.3	ND 1.3
Aroclor - 1221	ND 1.3	ND 1.3	ND 1.3	ND 1.4	ND 1.3	ND 1.2	ND 1.3	ND 1.3
Aroclor - 1232	ND 1.3	ND 1.3	ND 1.3	ND 1.4	ND 1.3	ND 1.2	ND 1.3	ND 1.3
Aroclor - 1242	ND 1.3	ND 1.3	ND 1.3	ND 1.4	ND 1.3	ND 1.2	ND 1.3	ND 1.3
Aroclor - 1248	ND 1.3	ND 1.3	ND 1.3	ND 1.4	ND 1.3	ND 1.2	ND 1.3	ND 1.3
Aroclor - 1254	ND 1.3	ND 1.3	ND 1.3	ND 1.4	ND 1.3	ND 1.2	ND 1.3	ND 1.3
Aroclor - 1260	1.9	1.0J	1.5	ND 1.4	1.6	ND 1.2	ND 1.3	ND 1.3

Sample ID	Z8	A5E	A5N	A5S	A5S Dup.	A5SE	A5W	A5NA
Sample date	7/27/95	7/31/95	7/31/95	7/31/95	7/31/95	7/31/95	7/28/95	7/31/95
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
I. SOIL BORING PCB RESULTS - cont.								
PCBs								
Aroclor - 1016	ND 1.3	ND 1.2	ND 1.2	ND 1.3	ND 1.4	ND 1.4	ND 1.4	ND 1.2
Aroclor - 1221	ND 1.3	ND 1.2	ND 1.2	ND 1.3	ND 1.4	ND 1.4	ND 1.4	ND 1.2
Aroclor - 1232	ND 1.3	ND 1.2	ND 1.2	ND 1.3	ND 1.4	ND 1.4	ND 1.4	ND 1.2
Aroclor - 1242	ND 1.3	ND 1.2	ND 1.2	ND 1.3	ND 1.4	ND 1.4	ND 1.4	ND 1.2
Aroclor - 1248	ND 1.3	ND 1.2	ND 1.2	ND 1.3	ND 1.4	ND 1.4	ND 1.4	ND 1.2
Aroclor - 1254	ND 1.3	ND 1.2	ND 1.2	ND 1.3	ND 1.4	ND 1.4	ND 1.4	ND 1.2
Aroclor - 1260	ND 1.3	60 D	1.6	2100 DJ	23000 DJ	16	ND 1.4	ND 1.2

TABLE 4-1
FMC TONAWANDA FACILITY - ADDITIONAL INVESTIGATION
SOIL BORING AND SURFACE SOIL GRID SAMPLE PCB RESULTS

Sample ID	D4	Y4C	Y7A	EB	HB	IB	Rinsate-1	Rinsate-2
Sample date	7/28/95	7/28/95	7/31/95	7/27/95	7/27/95	7/27/95	7/28/95	7/31/95
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/l	ug/l
I. SOIL BORING PCB RESULTS - cont.								
PCBs								
Aroclor - 1016	ND 1.1	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 0.50	ND 0.50
Aroclor - 1221	ND 1.1	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 0.50	ND 0.50
Aroclor - 1232	ND 1.1	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 0.50	ND 0.50
Aroclor - 1242	ND 1.1	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 0.50	ND 0.50
Aroclor - 1248	ND 1.1	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 0.50	ND 0.50
Aroclor - 1254	ND 1.1	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 1.2	ND 0.50	ND 0.50
Aroclor - 1260	ND 1.1	ND 1.2	2.0	ND 1.2	ND 1.2	ND 1.2	ND 0.50	ND 0.50

Sample ID	X6S	X7S	Y6S	Y7S	Z6S	A5ES	A5ES Dup.	A5NS
Sample date	8/1/95	8/1/95	8/1/95	8/1/95	7/28/95	8/7/95	8/7/95	8/15/95
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
II. SURFACE SOIL PCB RESULTS.								
PCBs								
Aroclor - 1016	ND 0.093	ND 0.094	ND 0.098	ND 0.094	ND 0.110	ND 0.096	ND 0.094	ND 0.095
Aroclor - 1221	ND 0.093	ND 0.094	ND 0.098	ND 0.094	ND 0.110	ND 0.096	ND 0.094	ND 0.095
Aroclor - 1232	ND 0.093	ND 0.094	ND 0.098	ND 0.094	ND 0.110	ND 0.096	ND 0.094	ND 0.095
Aroclor - 1242	ND 0.093	ND 0.094	ND 0.098	ND 0.094	ND 0.110	ND 0.096	ND 0.094	ND 0.095
Aroclor - 1248	ND 0.093	ND 0.094	ND 0.098	ND 0.094	ND 0.110	ND 0.096	ND 0.094	ND 0.095
Aroclor - 1254	ND 0.093	ND 0.094	ND 0.098	ND 0.094	ND 0.110	ND 0.096	ND 0.094	ND 0.095
Aroclor - 1260	ND 0.093	0.690	2.8	86 D	0.180	0.73	0.97	0.210

TABLE 4-1
FMC TONAWANDA FACILITY - ADDITIONAL INVESTIGATION
SOIL BORING AND SURFACE SOIL GRID SAMPLE PCB RESULTS

Sample ID	A5SES	A5SS	A5WS	Rinsate-3				
Sample date	8/7/95	8/7/95	7/28/95	8/7/95				
Units	mg/kg	mg/kg	mg/kg	ug/l				
II.SURFACE SOIL PCB RESULTS - cont.								
PCBs								
Aroclor - 1016	ND 0.093	ND 0.096	ND 0.100	ND 0.50				
Aroclor - 1221	ND 0.093	ND 0.096	ND 0.100	ND 0.50				
Aroclor - 1232	ND 0.093	ND 0.096	ND 0.100	ND 0.50				
Aroclor - 1242	ND 0.093	ND 0.096	ND 0.100	ND 0.50				
Aroclor - 1248	ND 0.093	ND 0.096	0.340	ND 0.50				
Aroclor - 1254	ND 0.093	ND 0.096	ND 0.100	ND 0.50				
Aroclor - 1260	1.4	1.5	0.490	ND 0.50				

NOTES:
ND - Non - detected at presented quantitation limit.
D - Result reported from secondary dilution analysis.
J - Estimated concentration (see Appendix C).

TABLE 5-1
FMC TONAWANDA FACILITY
REMEDIAL MEASURES
FIELD/LABORATORY PCB RESULTS (PPM)

LOCATION	SAMPLE TYPE	FIRST CUT Sample ID Field/Lab	SECOND CUT Sample ID Field/Lab	THIRD CUT Sample ID Field/Lab	FOURTH CUT Sample ID Field/Lab	FIFTH CUT Sample ID Field/Lab	SIXTH CUT Sample ID Field/Lab
A							
North	Surface	ANS <1/1.0	AANS1 NFT/1.3 & 2.0	AANS2 NFT/0.92			
	Subsurface	AN <1/32	AN2 NFT/0.061				
South	Surface	ASS >10/NLT	ASS2 >1<10/NLT	ASS3 NFT/54	AASS1 NFT/9	AASS2 NFT/5.9(1)	
	Subsurface	AS <1/0.31					
East	Surface	AES >1<10/NLT	AES2 >10/NLT	AES3 >10/NLT	AES4 >10/NLT	AES5 <1/1.3	AAES1 NFT/0.15
	Subsurface	AE >10/NLT	AE 2 >10/NLT	AE3 >1<10/180	AE4 NFT/0.13		
West	Surface	AWS <1/NLT	AWS2 <1/1.34	AAWS1 NFT/0.29			
	Subsurface	AW >10/NLT	AW2 <1/ND 1.0				
Bottom	Base	AB <1/1.4					

NOTES:
NFT - Lab sample submitted was not field tested.
NLT - Field sample was not lab tested.
ND - Non-detected at presented quantitation limit.
Shaded areas indicates final cut.
(1) - Result exceeded surface soil cleanup criterion; however the surface soil south of Location A and north of Location D was completely removed.

TABLE 5-1
FMC TONAWANDA FACILITY
REMEDIAL MEASURES
FIELD/LABORATORY PCB RESULTS (PPM)

LOCATION	SAMPLE TYPE	FIRST CUT Sample ID Field/Lab	SECOND CUT Sample ID Field/Lab	THIRD CUT Sample ID Field/Lab	FOURTH CUT Sample ID Field/Lab	FIFTH CUT Sample ID Field/Lab	SIXTH CUT Sample ID Field/Lab
D							
North	Surface	NOT SAMPLED	DNS >1<10/NLT	DNS2 NFT/2.4	DDNS1 NFT/6.2	DDNS2 NFT/9.7(1)	
	Subsurface	DN >10/NLT	DN2 >10/NLT	DN3 >1<10/42	DN4 NFT/ND 1.0		
South	Surface	DSS >1<10/NLT	DSS2 NFT/2.8	DDSS1 NFT/2.4	DDSS2 NFT/4.2	DDSS3 NFT/3.1	DDSS4 NFT/0.2
	Subsurface	DS >1<10/0.92					
East	Surface	DES >1<10/NLT	DES2 NFT/0.43				
	Subsurface	DE >1<10/1.56					
West	Surface	DWS <1/0.6					
	Subsurface	DW >1<10/1.5					
Bottom	Base	DB <1/ND 1.0 & ND 1.0					

NOTES:
NFT - Lab sample submitted was not field tested.
NLT - Field sample was not lab tested.
ND - Non-detected at presented quantitation limit.
Shaded areas indicates final cut.
(1) - Result exceeded surface soil cleanup criterion; however the surface soil south of Location A and north of Location D was completely removed.

TABLE 5-2
FMC TONAWANDA FACILITY - REMEDIAL MEASURES
SURFACE AND SUBSURFACE SOIL COMMERCIAL LABORATORY PCB RESULTS

Sample ID Location Sample date Units I.LOCATION A	AN N.Subsurface 10/10/95 mg/kg	AN2 N.Subsurface 10/18/95 mg/kg	ANS N.Surface 10/10/95 mg/kg	AANS1 N.Surface 10/17/95 mg/kg	AANS1Dup N.Surface 10/17/95 mg/kg	AANS2 N.Surface 10/17/95 mg/kg	AS S.Subsurface 10/10/95 mg/kg	ASS3 S.Surface 1O/11/95 mg/kg
PCBs								
Aroclor - 1016	ND 2.2	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 2.2
Aroclor - 1221	ND 2.2	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 2.2
Aroclor - 1232	ND 2.2	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 2.2
Aroclor - 1242	ND 2.2	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 2.2
Aroclor - 1248	ND 2.2	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 2.2
Aroclor - 1254	ND 2.2	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 2.2
Aroclor - 1260	32	0.061J	1.0	1.3	2.0	0.92J	0.31J	54

Sample ID Location Sample date Units I.LOCATION A	AASS1 S.Surface 10/17/95 mg/kg	AASS2 S.Surface 10/17/95 mg/kg	AE3 E.Subsurface 10/12/95 mg/kg	AE4 E.Subsurface 10/18/95 mg/kg	AES5 E.Surface 10/12/95 mg/kg	AAES1 E.Surface 10/17/95 mg/kg	AW2 W.Subsurface 10/10/95 mg/kg	AWS2 W.Surface 10/10/95 mg/kg
PCBs								
Aroclor - 1016	ND 1.1	ND 1.0	ND 5.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1221	ND 1.1	ND 1.0	ND 5.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1232	ND 1.1	ND 1.0	ND 5.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1242	ND 1.1	ND 1.0	ND 5.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1248	ND 1.1	ND 1.0	ND 5.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	1.1
Aroclor - 1254	ND 1.1	ND 1.0	ND 5.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1260	9.0	5.9	180	0.13J	1.3	0.15J	ND 1.0	0.24J

TABLE 5-2
FMC TONAWANDA FACILITY - REMEDIAL MEASURES
SURFACE AND SUBSURFACE SOIL COMMERCIAL LABORATORY PCB RESULTS

Sample ID Location Sample date Units I.LOCATION A	AAWS1 W.Surface 10/17/95 mg/kg	AB Base 10/10/95 mg/kg						
PCBs								
Aroclor - 1016	ND 1.0	ND 1.0						
Aroclor - 1221	ND 1.0	ND 1.0						
Aroclor - 1232	ND 1.0	ND 1.0						
Aroclor - 1242	ND 1.0	ND 1.0						
Aroclor - 1248	ND 1.0	ND 1.0						
Aroclor - 1254	0.29J	ND 1.0						
Aroclor - 1260	ND 1.0	1.4						

Sample ID Location Sample date Units II.LOCATION D	DN3 N.Subsurface 10/11/95 mg/kg	DN4 N.Subsurface 10/19/94 mg/kg	DNS2 N.Surface 10/11/95 mg/kg	DDNS1 N.Surface 10/17/95 mg/kg	DDNS2 N.Surface 10/17/95 mg/kg	DS S.Subsurface 10/10/95 mg/kg	DSS2 S.Surface 10/11/95 mg/kg	DDSS1 S.Surface 10/17/95 mg/kg
PCBs								
Aroclor - 1016	ND 5.8	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1221	ND 5.8	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1232	ND 5.8	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1242	ND 5.8	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1248	ND 5.8	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1254	42	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1260	ND 5.8	ND 1.0	2.4	6.2	9.7	0.92J	2.8	2.4

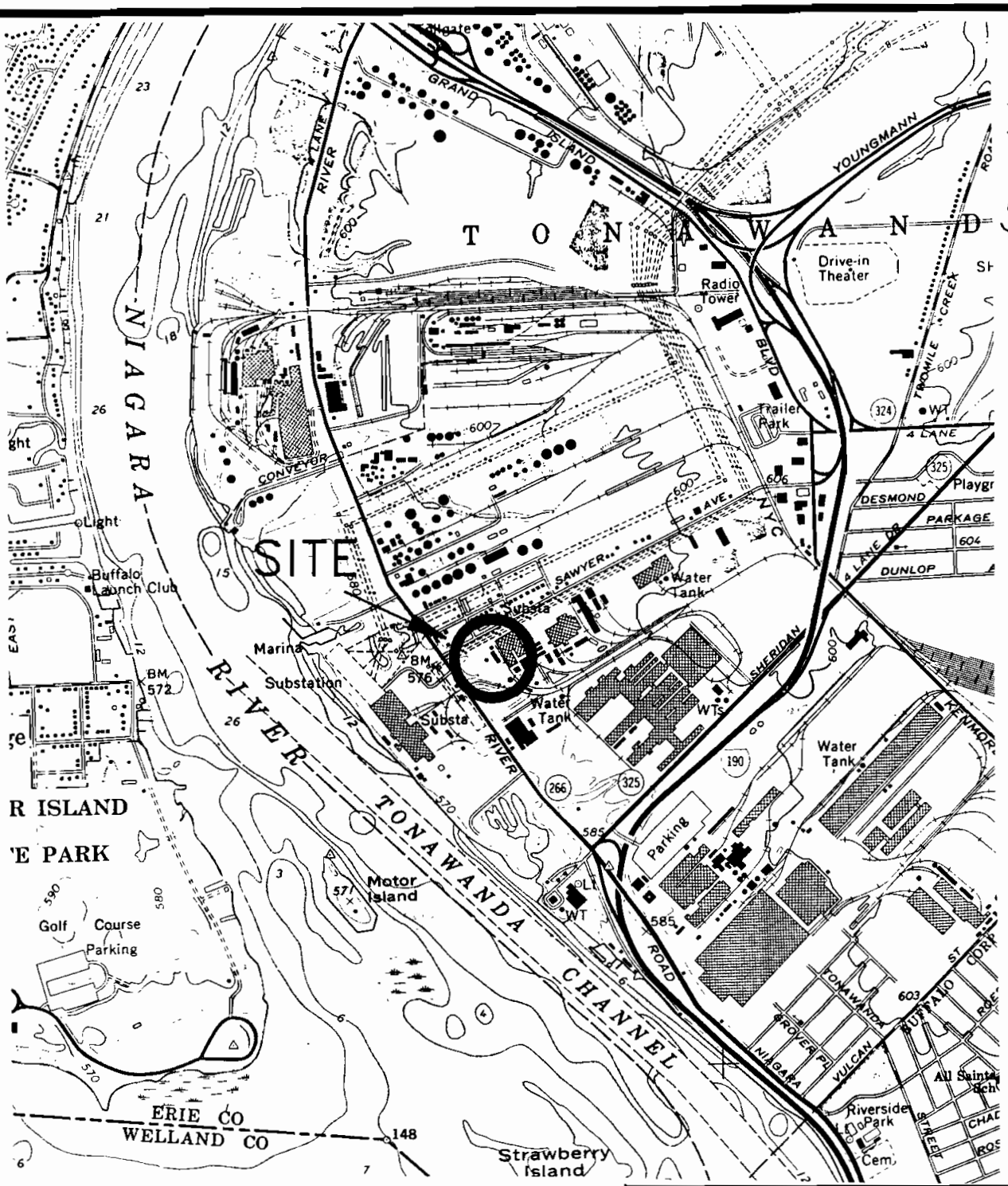
TABLE 5-2
FMC TONAWANDA FACILITY - REMEDIAL MEASURES
SURFACE AND SUBSURFACE SOIL COMMERCIAL LABORATORY PCB RESULTS

Sample ID Location Sample date Units II.LOCATION D	DDSS2 S.Surface 10/17/95 mg/kg	DDSS3 S.Surface 10/17/95 mg/kg	DDSS4 S.Surface 10/20/95 mg/kg	DE E.Subsurface 10/11/95 mg/kg	DES2 E.Surface 7/27/95 mg/kg	DW W.Subsurface 10/10/95 mg/kg	DWS W.Surface 10/11/95 mg/kg	DB Base 10/11/95 mg/kg
PCBs								
Aroclor - 1016	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1221	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1232	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1242	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1248	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1254	ND 1.0	ND 1.0	ND 1.0	0.75J	ND 1.0	ND 1.0	ND 1.0	ND 1.0
Aroclor - 1260	4.2	3.1	0.20J	0.81J	0.43J	1.5	0.60J	ND 1.0

Sample ID Location Sample date Units II.LOCATION D	DB Dup. Base 10/11/95 mg/kg
PCBs	
Aroclor - 1016	ND 1.0
Aroclor - 1221	ND 1.0
Aroclor - 1232	ND 1.0
Aroclor - 1242	ND 1.0
Aroclor - 1248	ND 1.0
Aroclor - 1254	ND 1.0
Aroclor - 1260	ND 1.0

NOTES:
ND - Non - detected at presented quantitation limit.
J - Estimated concentration.

Figures



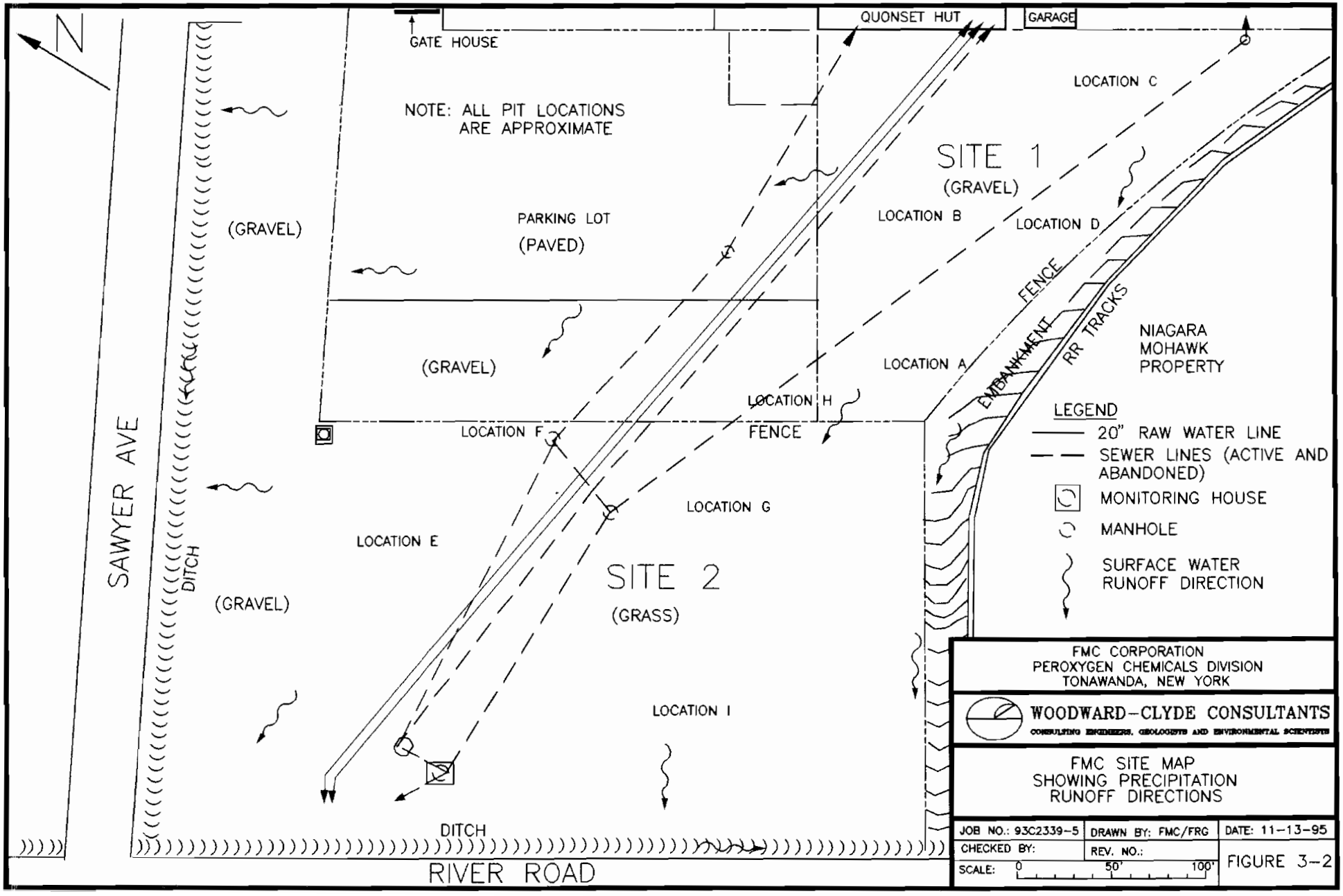
From U.S.G.S. Buffalo NW, N.Y.–Ont. Quadrangle
NW/4 Buffalo 15'
N4252.5–W7852.5/7.5

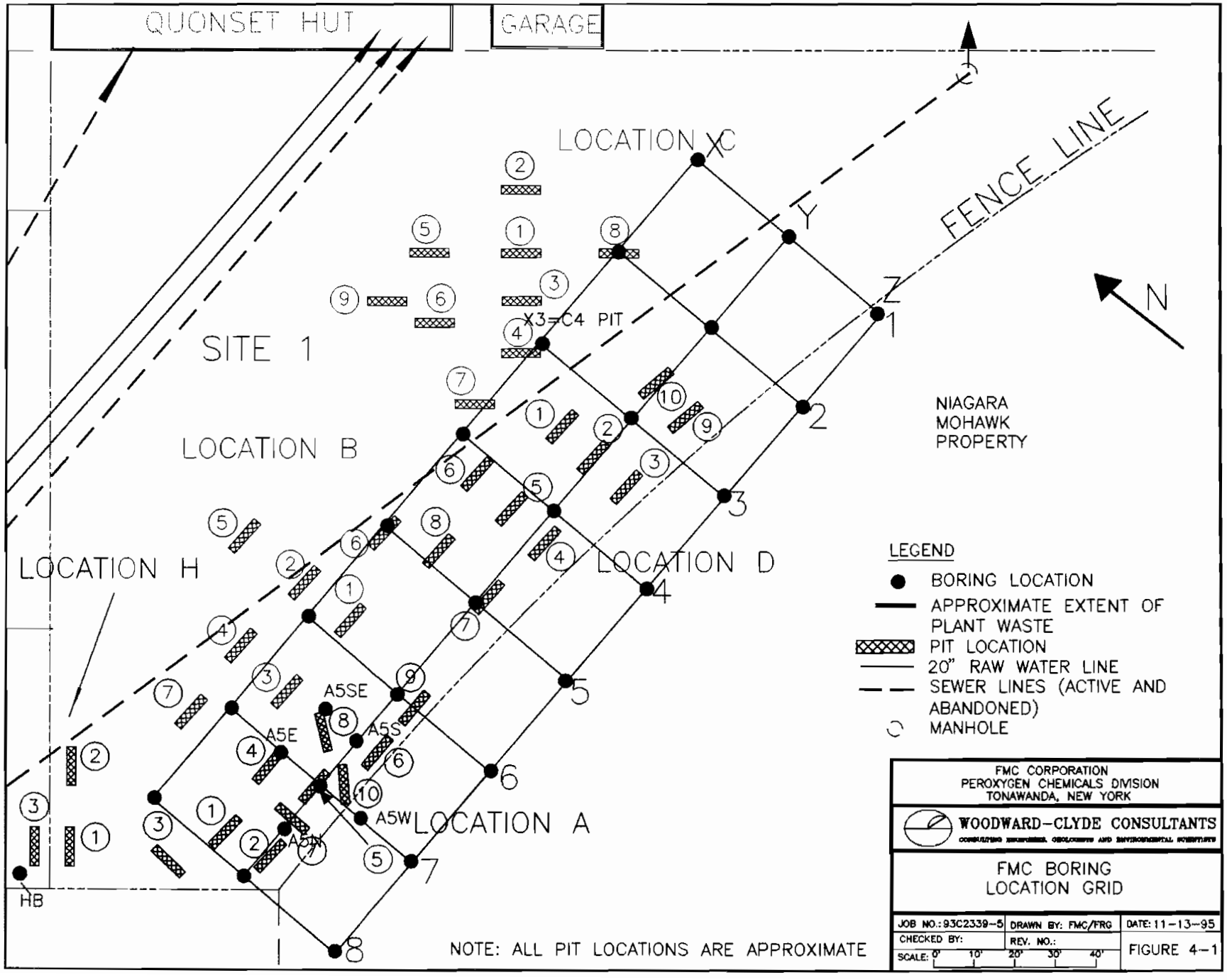
FMC Peroxygen Chemicals Division
Preliminary Site Assessment

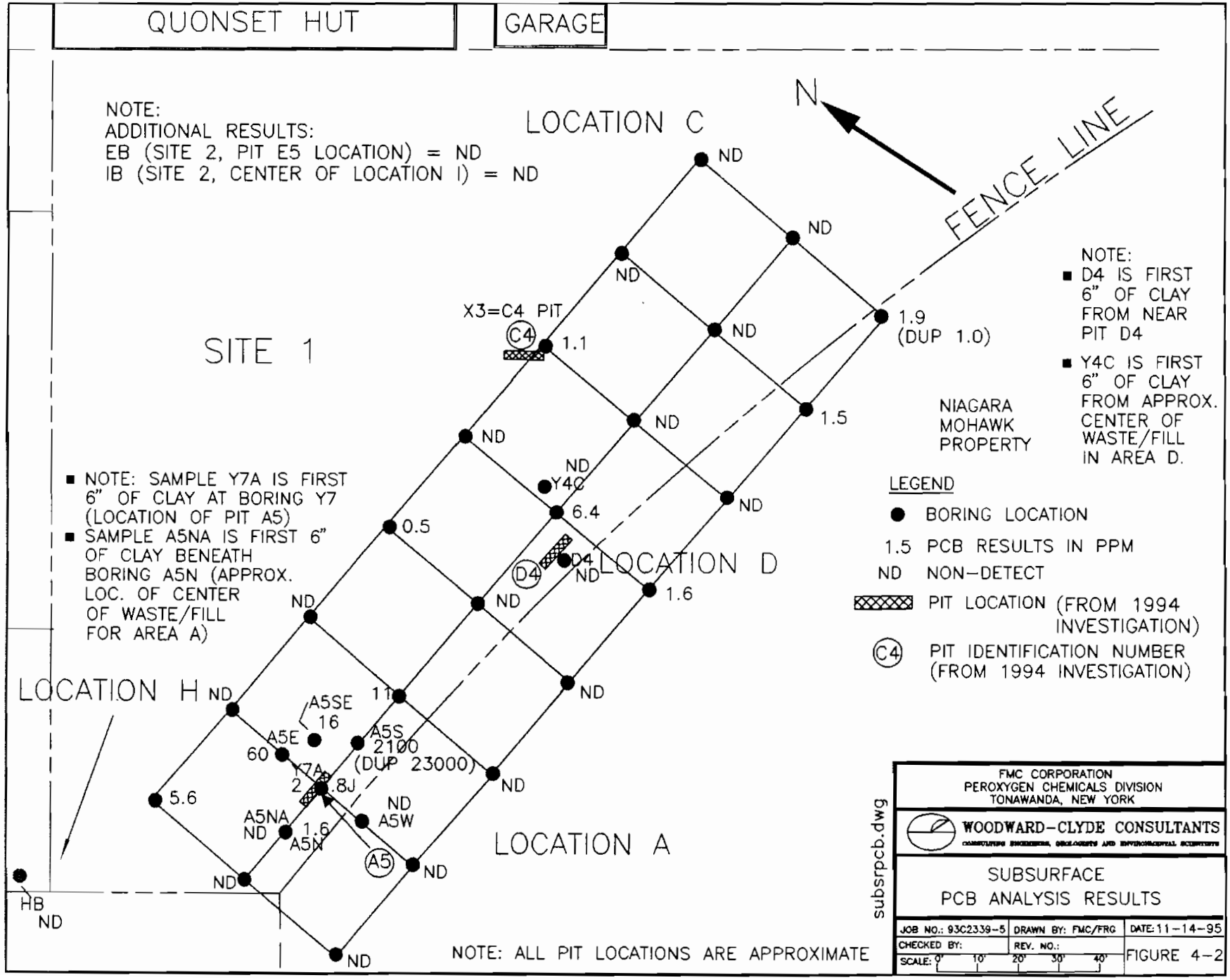
WOODWARD–CLYDE CONSULTANTS
Consulting Engineers, Geologists and Environmental Scientists

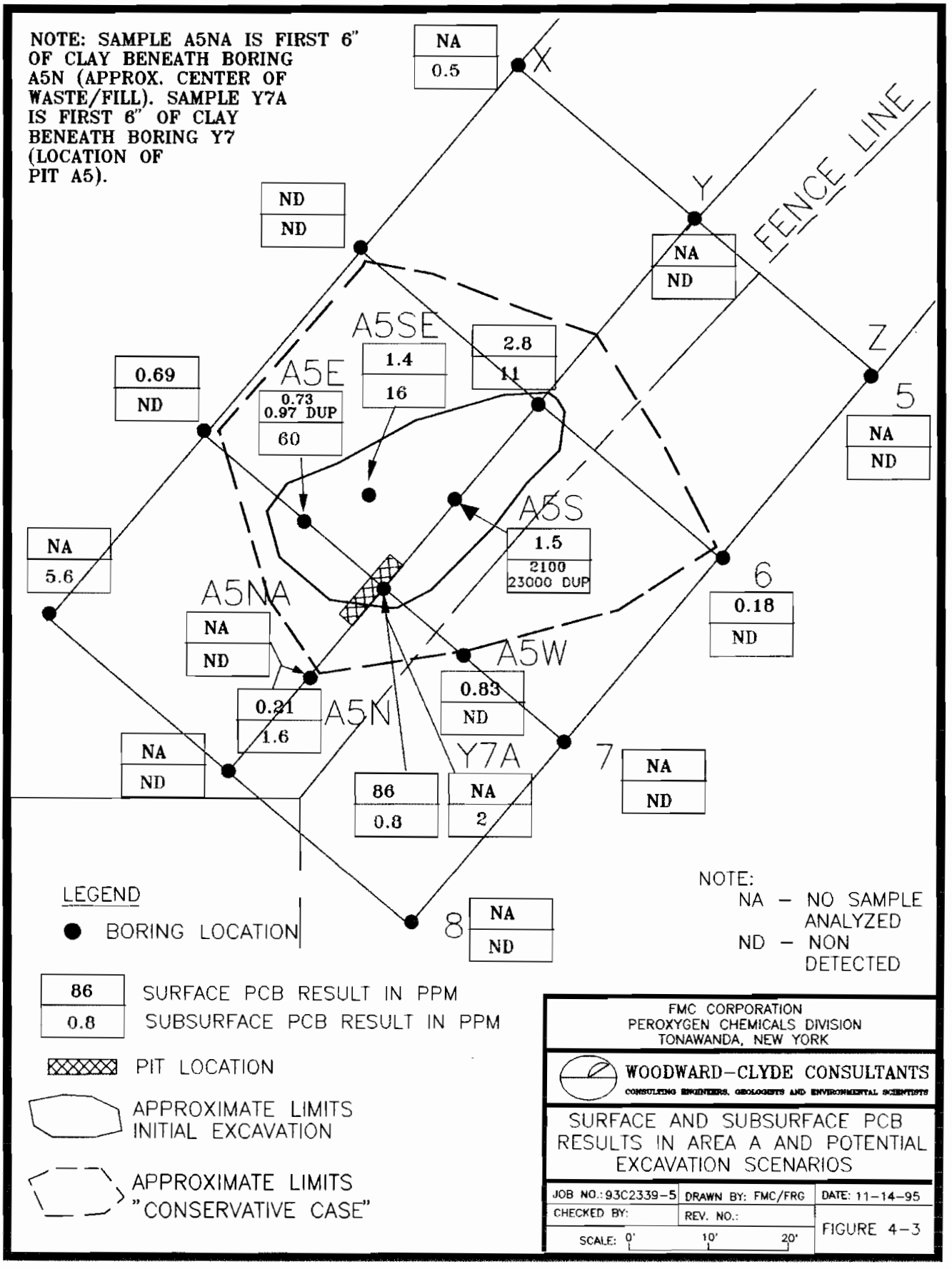
SITE LOCATION MAP

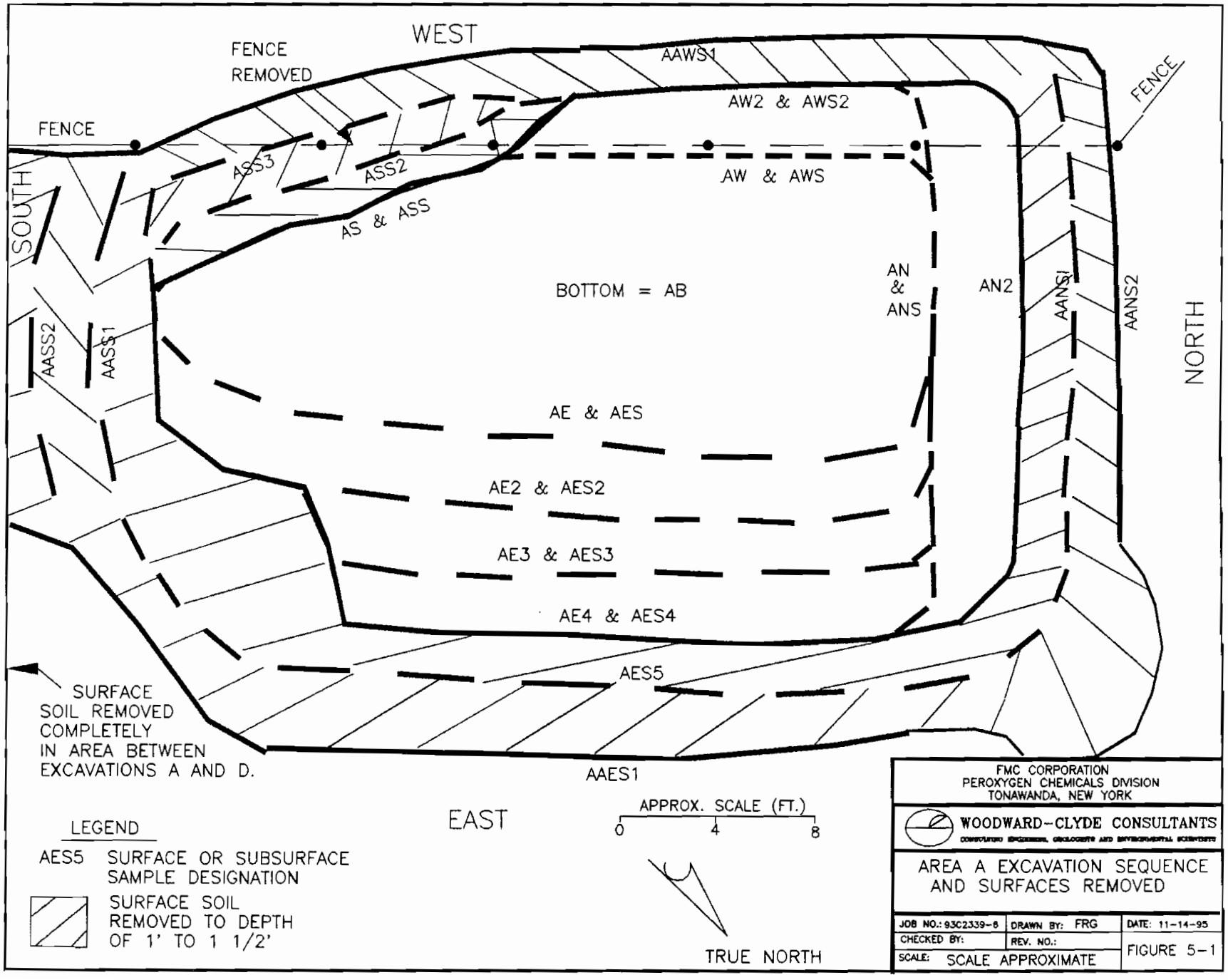
Job No.:93C2339–1	Drawing No.	Date:
Checked by: JFR	Rev. No.:	
Scale: 1"=2000'		Figure 3–1

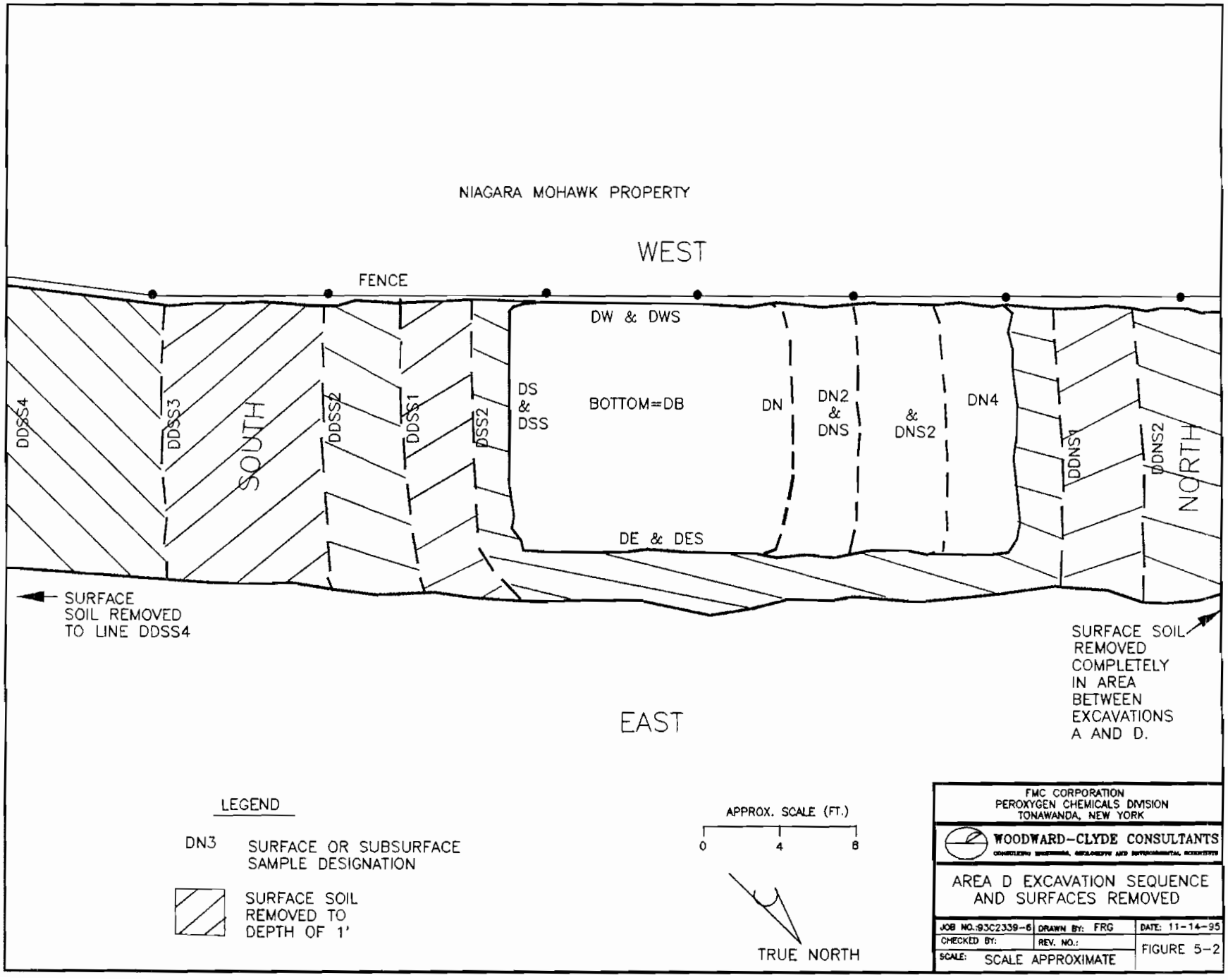

N
GATE HOUSE
QUONSET HUT
GARAGE
NOTE: ALL PIT LOCATIONS ARE APPROXIMATE
LOCATION C
SITE 1
(GRAVEL)
PARKING LOT
(PAVED)
LOCATION B
LOCATION D
(GRAVEL)
FENCE
EMBANKMENT
RR TRACKS
NIAGARA MOHAWK PROPERTY
(GRAVEL)
LOCATION A
LOCATION H
LOCATION F
FENCE
SAWYER AVE
DITCH
LOCATION G
LOCATION E
SITE 2
(GRASS)
(GRAVEL)
LOCATION I
DITCH
RIVER ROAD
LEGEND
20" RAW WATER LINE
SEWER LINES (ACTIVE AND ABANDONED)
MONITORING HOUSE
MANHOLE
SURFACE WATER RUNOFF DIRECTION
FMC CORPORATION
PEROXYGEN CHEMICALS DIVISION
TONAWANDA, NEW YORK
WOODWARD-CLYDE CONSULTANTS
CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS
FMC SITE MAP
SHOWING PRECIPITATION
RUNOFF DIRECTIONS
JOB NO.: 93C2339-5
DRAWN BY: FMC/FRG
DATE: 11-13-95
CHECKED BY:
REV. NO.:
SCALE: 0 50' 100'
FIGURE 3-2


QUONSET HUT
GARAGE
FENCE LINE
LOCATION XC
SITE 1
X3=C4 PIT
LOCATION B
LOCATION H
LOCATION D
LOCATION A
A5SE
A5E
A5S
A5W
A5N
HB
NIAGARA MOHAWK PROPERTY
N
LEGEND
BORING LOCATION
APPROXIMATE EXTENT OF PLANT WASTE
PIT LOCATION
20" RAW WATER LINE
SEWER LINES (ACTIVE AND ABANDONED)
MANHOLE
NOTE: ALL PIT LOCATIONS ARE APPROXIMATE
FMC CORPORATION
PEROXYGEN CHEMICALS DIVISION
TONAWANDA, NEW YORK
WOODWARD-CLYDE CONSULTANTS
FMC BORING
LOCATION GRID
JOB NO.: 93C2339-5
DRAWN BY: FMC/FRG
DATE: 11-13-95
CHECKED BY:
REV. NO.:
SCALE: 0' 10' 20' 30' 40'
FIGURE 4-1


QUONSET HUT
GARAGE
NOTE:
ADDITIONAL RESULTS:
EB (SITE 2, PIT E5 LOCATION) = ND
IB (SITE 2, CENTER OF LOCATION I) = ND
LOCATION C
N
FENCE LINE
SITE 1
X3=C4 PIT
C4
1.1
1.9
(DUP 1.0)
1.5
NIAGARA
MOHAWK
PROPERTY
NOTE:
■ D4 IS FIRST 6" OF CLAY FROM NEAR PIT D4
■ Y4C IS FIRST 6" OF CLAY FROM APPROX. CENTER OF WASTE/FILL IN AREA D.
■ NOTE: SAMPLE Y7A IS FIRST 6" OF CLAY AT BORING Y7 (LOCATION OF PIT A5)
■ SAMPLE A5NA IS FIRST 6" OF CLAY BENEATH BORING A5N (APPROX. LOC. OF CENTER OF WASTE/FILL FOR AREA A)
Y4C
6.4
0.5
D4
LOCATION D
1.6
LOCATION H
A5SE
16
A5E
60
A5S
2100
(DUP 23000)
Y7A
2
8J
5.6
A5NA
ND
1.6
A5N
ND
A5W
A5
LOCATION A
HB
ND
LEGEND
BORING LOCATION
1.5 PCB RESULTS IN PPM
ND NON-DETECT
PIT LOCATION (FROM 1994 INVESTIGATION)
C4 PIT IDENTIFICATION NUMBER (FROM 1994 INVESTIGATION)
NOTE: ALL PIT LOCATIONS ARE APPROXIMATE
subsrpcb.dwg
FMC CORPORATION
PEROXYGEN CHEMICALS DIVISION
TONAWANDA, NEW YORK
WOODWARD-CLYDE CONSULTANTS
SUBSURFACE
PCB ANALYSIS RESULTS
JOB NO.: 93C2339-5
DRAWN BY: FMC/FRG
DATE: 11-14-95
CHECKED BY:
REV. NO.:
SCALE: 0' 10' 20' 30' 40'
FIGURE 4-2


NOTE: SAMPLE A5NA IS FIRST 6" OF CLAY BENEATH BORING A5N (APPROX. CENTER OF WASTE/FILL). SAMPLE Y7A IS FIRST 6" OF CLAY BENEATH BORING Y7 (LOCATION OF PIT A5).
NA 0.5
X
Y
Z
FENCE LINE
ND ND
NA ND
A5SE
2.8 11
1.4 16
A5E
0.73 0.97 DUP 60
0.69 ND
5
NA ND
A5S
1.5 2100 23000 DUP
NA 5.6
A5NA
NA ND
6
0.18 ND
A5W
0.83 ND
0.21 1.6
A5N
NA ND
Y7A
7
NA ND
86 0.8
NA 2
8
NA ND
LEGEND
BORING LOCATION
86 SURFACE PCB RESULT IN PPM
0.8 SUBSURFACE PCB RESULT IN PPM
PIT LOCATION
APPROXIMATE LIMITS INITIAL EXCAVATION
APPROXIMATE LIMITS "CONSERVATIVE CASE"
NOTE:
NA – NO SAMPLE ANALYZED
ND – NON DETECTED
FMC CORPORATION
PEROXYGEN CHEMICALS DIVISION
TONAWANDA, NEW YORK
WOODWARD–CLYDE CONSULTANTS
CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS
SURFACE AND SUBSURFACE PCB RESULTS IN AREA A AND POTENTIAL EXCAVATION SCENARIOS
JOB NO.: 93C2339-5
DRAWN BY: FMC/FRG
DATE: 11-14-95
CHECKED BY:
REV. NO.:
SCALE: 0' 10' 20'
FIGURE 4-3


WEST
FENCE
REMOVED
FENCE
AAWS1
AW2 & AWS2
FENCE
ASS3
ASS2
AW & AWS
SOUTH
AS & ASS
BOTTOM = AB
AN
&
ANS
AN2
AANS1
AANS2
NORTH
AASS2
AASS1
AE & AES
AE2 & AES2
AE3 & AES3
AE4 & AES4
AES5
SURFACE
SOIL REMOVED
COMPLETELY
IN AREA BETWEEN
EXCAVATIONS A AND D.
AAES1
EAST
APPROX. SCALE (FT.)
0
4
8
LEGEND
AES5 SURFACE OR SUBSURFACE
SAMPLE DESIGNATION
SURFACE SOIL
REMOVED TO DEPTH
OF 1' TO 1 1/2'
TRUE NORTH
FMC CORPORATION
PEROXYGEN CHEMICALS DIVISION
TONAWANDA, NEW YORK
WOODWARD-CLYDE CONSULTANTS
AREA A EXCAVATION SEQUENCE
AND SURFACES REMOVED
JOB NO.: 93C2339-6
DRAWN BY: FRG
DATE: 11-14-95
CHECKED BY:
REV. NO.:
SCALE: SCALE APPROXIMATE
FIGURE 5-1


NIAGARA MOHAWK PROPERTY
WEST
FENCE
DW & DWS
DS & DSS
BOTTOM=DB
DN
DN2 & DNS
& DNS2
DN4
DDSS4
DDSS3
SOUTH
DDSS2
DDSS1
DSS2
DDNS1
DDNS2
NORTH
DE & DES
SURFACE SOIL REMOVED TO LINE DDSS4
SURFACE SOIL REMOVED COMPLETELY IN AREA BETWEEN EXCAVATIONS A AND D.
EAST
LEGEND
DN3 SURFACE OR SUBSURFACE SAMPLE DESIGNATION
SURFACE SOIL REMOVED TO DEPTH OF 1'
APPROX. SCALE (FT.)
0 4 8
TRUE NORTH
FMC CORPORATION
PEROXYGEN CHEMICALS DIVISION
TONAWANDA, NEW YORK
WOODWARD-CLYDE CONSULTANTS
AREA D EXCAVATION SEQUENCE AND SURFACES REMOVED
JOB NO.:93C2339-6
DRAWN BY: FRG
DATE: 11-14-95
CHECKED BY:
REV. NO.:
SCALE: SCALE APPROXIMATE
FIGURE 5-2

APPENDIX A

SOIL BORING LOGS

ADDITIONAL INVESTIGATION

LOG OF BORING X1

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4 5 8 9	Brown clay and gravel (Cap). Black silt and sand, occasionally flecked white (flyash?), trace gravel. Sample X1.	1.2	0
2	4 5 8 14	Red-brown clay, trace gravel (Native).	1.2	
4		Bottom of boring		

SURFACE ELEVATION: COMPLETION DEPTH: 4.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING X2

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	6	Red-brown clay, some gravel (Cap).	1.1	0
	10	Black sand and silt, occcasionally flecked white (flyash?), little fine gravel. Sample X2.		
	10			
	7			
2		Red-brown clay, some occasional black silt seams (flyash?).		
	4		1.1	
3	4	Red-brown clay, trace gravel (Native).		
	6			
	10			
4		Bottom of boring		
5				
6				
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 4.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING X3

DATE: 7-27-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4	Gravel and brown silt		
	6	Red-brown to black clay, some gravel. Very stiff.	1.2	0
	6			
2	8			
	7			
3	7	Tan-brown sand, trace silt.	1.0	0
	7			
4	5	Brown clay, some gravel, trace brick fragments. Sample X3.		0
	3			
5	3		0.5	
	7			
6	3	Red-brown clay, trace gravel (Native).		
	16			
7	18		1.0	
	20			
8	18			
		Bottom of boring		
9				
10		* NOTE: This location corresponds to test pit location C4 and is a NYSDEC requested boring.		
11				

SURFACE ELEVATION: COMPLETION DEPTH: 8.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING X4

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3 4 7 7	Brown clay and gravel (Cap). Red-brown clay, mottled with black clay, some silt, trace gravel. Sample X4.	1.5	0
2	4			
3	4 7 8	Red-brown clay, trace gravel (Native).	1.4	
4		Bottom of boring		
5				
6				
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 4.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING X5

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4	Brown silt and clay, some gravel (Cap).	1.2	0
	4	Brown clay and red brick fragments.		
	4			
	4	Black and red-brown clay, some seams of red-brown, mottled black silt (flyash?).		
2	3	...as above	0.1	
3	4			
	5			
	5			
4	3	Brown to black-brown clay, some black silt. Sample X5.	1.1	0
	7			
5	16	Red-brown clay, trace gravel (Native)		
	16			
6		Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING X6

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3 2 4 5	Brown clay and gravel (Cap). Red-brown clay with little yellow and black mottling, trace gravel.	0.8	0
2	4			
3	5 10 13	Black clay and silt, some sand (flyash?). Soft, moist. Sample X6.	1.3	0
4	5			
5	10 12 21	Red-brown clay, trace gravel (Native).	1.0	
6		Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING X7

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4 3 6 8	Brown clay and gravel (Cap). Black fine sand and silt (flyash?), some clay. Sample X7.	0.7	0
2	5 5 5 5	Red-brown clay, with some black mottling, trace gravel.	0.9	0
4	NA NA NA NA	no recovery	no recovery	
6	12 14 18 13	Red-brown clay, trace gravel (Native). Slightly moist.	1.7	
8		Bottom of boring		
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 8.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS

PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING X8

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	6 8 10 8	Brown clay and gravel (Cap). Black silt and clay, some gravel. Wet. Sample X8. (Area of perched water in brick rubble discovered during the test pit study.)	1.0	0
2	4 8 12 8	Red-brown clay, trace gravel (Native). Stiff, dry.	1.3	
4		Bottom of boring		
5				
6				
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 4.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y1

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4	Brown clay, little gravel. (Cap).	1.5	0
	10	Black clay, some gravel .		
	11	Brown to black sand, occasional white flecks (flyash?), trace silt. Sample Y1.		
2	7			0
	3			
3	4	Red-brown clay, trace gravel (Native)	0.9	
	8			
4	9			
		Bottom of boring		
5				
6				
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 4.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y2

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4 7 7 7	Red-brown clay and gravel (Cap). Black silt, some sand (flyash?)	0.8	0.5
2	2 3	Black and red-brown clay, some black silt (flyash?), little gravel. Sample Y2.		0
3	3 4	Red-brown clay, occasionally mottled yellow, trace gravel. Sample Y2.	1.4	
4	4 13	Red-brown clay, trace gravel (Native).		
5	13 22		1.2	
6		Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y3

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4 5 8 7	Brown clay and gravel (Cap). Red-brown clay, occasionally mottled black	0.7	0
2				
3	3 3 4 5	Red-brown clay, trace gravel. Soft.	0.8	0
4	3	Black silt and sand (flyash?), trace gravel.		
5	3 3 3	Red-brown clay, occasionally mottled black, with thin black silt seams. Moist. Sample Y3.	1.3	0
6	3			
7	3 3 3	Black silt and clay. Soft and moist with sewage-like odor. Sample Y3.	0.7	0
8	4			
9	8 14 21	Red-brown clay, trace gravel (Native).	1.3	
10		Bottom of boring		
11				

SURFACE ELEVATION: COMPLETION DEPTH: 10.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y4

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3	Brown clay and gravel (Cap)		
	4		0.2	
	4			
2	4	Red-brown clay, some black silt seams (flyash?), moist.		
	3			
3	2	Brown to brown-black clay and silt, some white flecks, moist. Sewage like odor. Sample Y4.	1.4	0.5
	4			
4	4			
	3	Red-brown clay, trace gravel. Stiff, dry. (Native)		
5	4		1.1	
	15			
6	16			
		Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y4C

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1				
2				
3		Auger to 3 feet		
4	3 4 4 5	? ? Red-brown to black clay, some black silt	no recovery	
5	3 15 16 18	Red-brown clay, trace gravel (Native). Samples from 5.3'-5.8', 5.8'-6.3', 6.3'-6.7' in native clay (or 0-6", 6"-12", and 12"-18" below top of native clay).	1.7	
6				
7		Bottom of boring		
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 7.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y5

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3 4 5 7	Brown silt and gravel (Cap) Black silt and sand (flyash?) Black to red-brown clay, some black silt, trace gravel.	1.0	
2	3 1 1 3	...becoming moist. Black silt and sand, little gravel, moist to wet (white, flaky, hard substance and disk of plastic in spoon tip). Sample Y5. ....as above with increasing black clay.	0.6	0
4	1 1 3 6	Red-brown clay with seams of red-brown and mottled black clay. Sample Y5. grades to...	1.1	0
6	3 8 9 15	Red-brown clay, trace gravel (Native).	1.4	
8		Bottom of boring		
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 8.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y6

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4 2 4 8	Brown clay and silt, some gravel (Cap).	0.4	
2	4 2	Red-brown clay and gravel Black to white coarse sand, little silt. Sample Y6.	1.0	0
3	3 4	Black and red-brown clay, some gravel, stiff to soft, moist. Sample Y6.		0
4	4 8		1.2	0
5	18 22	Red-brown clay, trace gravel (Native).		
6		Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y7

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	5	Gravel and brown silt (Cap).	0.2	
	6			
	4			
	3			
2	5	Red-brown clay mottled black, some gravel		
	4	Black to red-brown clay, some to little gravel, slightly moist. Sample Y7.	1.3	0
3	4			
	3			
4	4	Red-brown clay, some (white) gravel.		
	4	Red-brown clay mottled black and yellow, trace gravel.		0
5	6	Red-brown clay, trace gravel (Native) Sample Y7A (4.5'-5.0'), Sample Y7B (5.0'-5.4')	1.4	0
	10			
6	8	as above. Sample Y7C (6.5'-7.0'). Samples represent 0-6", 6"-12" and 18"-24" intervals below top of native clay.		
	13			
7	20		1.1	
	24			
8		Bottom of boring		
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 8.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Y8

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3 5 5 7	Red-brown clay and gravel, little silt (Cap) Black silt and clay, moist.	1.0	0
2	4	...becoming wet (Water perched at ~2' in brick rubble in test pits)		
3	4 9 9	Black clay mottled yellow, some silt, some red brick fragments. Becoming dry. Sample Y8.	1.3	0
4	4	No recovery - wet.		
5	8 8 14		0	
6		No recovery - becoming dryer.		
7	8 18 28 18		0	
8				
9	6 18 30 31	Red-brown clay, trace gravel, dry to slightly moist (Native)	1.3	
10		Bottom of boring		
11				

SURFACE ELEVATION: COMPLETION DEPTH: 10.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Z1

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	6	Brown clay and gravel (Cap)	0.6	
	7	Black silt and sand (flyash?), little brick fragments		
	13			
2	13			
	7	as above, less brick fragments, increasing black sand (flyash?) with white flecks. Sample Z1.	2.0	0
3	4	grades to...		
	4	Black clay, some silt, little sand		0
	7	Red-brown clay, trace gravel (Native).		
4	4		0.7	
	5			
5	7			
	13			
6		Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Z2

DATE: 7-27-95 LOCATION: SITE 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3	Brown clay, little silt, roots (Topsoil)		
	5	Black sand, some silt, little brick, slag	1.2	0
	15			
2	15			
	2	Black sand-like material (flyash?), flecked white. Dry to slightly moist. Sample Z2.		0
3	5		0.9	
	8			
4	8			
	11			
5	5		0.7	
	15	Red-brown clay, little gravel, stiff (Native)		
6	20			
	7			
7	17		1.2	
	25			
8	42			
		Bottom of boring		
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 8.0 FT. WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Z3

DATE: 7-27-95 LOCATION: SITE 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4 4 8 11	Brown sand, some silt and clay (Topsoil) Black sand, some silt, occasionally flecked white (flyash?)	1.4	0
2 3	8 8 4 4	as above with occasional red brick fragments. Sample Z3.	1.4	0
4 5	4 4 7 7	Red-brown clay, little gravel, trace silt, stiff (Native).	1.2	
6		Bottom of boring		
7 8 9 10 11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 FT. WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS

PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Z4

DATE: 7-27-95 LOCATION: SITE 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4 8 6 13	Brown clay, little silt (Topsoil) Brown clay, some gravel, trace black sand like material (flyash?). Very stiff. Dry.	0.9	0
2	3			
3	4 3 3	Black sand like material (flyash?), wet. Sample Z4.	0.6	1-2
4	4			0
5	15 18 20	Red-brown clay, little gravel (Native). Dry.	0.85	
6	10			
7	14 20 20		1.5	
8		Bottom of boring		
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 8.0 FT WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Z5

DATE: 7-27-95 LOCATION: SITE 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	8 10 100/.1	Brown silt, some sand, roots (Topsoil) Brown-black sand, some silt, brick fragment in spoon tip.	1.0	0
2	6	Brown-black sand with occasional white flecks, some red brick fragments and roots.		
3	7 8 6	Black sand like material with white flecks (flyash?)	0.8	0
4	3			0
5	3 6	Red-brown clay, trace gravel (Native). Dry.	1.1	
6	14			
		Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 FT WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Z6

DATE: 7-27-95 LOCATION: SITE 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3 3 6 20	Brown sand, some silt, little roots (Topsoil) Brown sand, some silt, mottled with black sand (flyash?) grading to...	0.8	0
2 3	3 3 6 9	Black sand, some silt and brick fragments. Sample Z6.	1.1	0
4 5	3 6 6 12	Red-brown clay, trace gravel. Dry, stiff. (Native)	1.2	
6		Bottom of boring		
7 8 9 10 11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 FT. WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Z7

DATE: 7-27-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	5 6 5 8	Brown silt, trace sand and roots (Topsoil) Black sand like material mottled with white flecks (flyash?), trace brick fragments.	1.1	
2 3	3 5 6 8	becoming moist... Sample Z7.	1.2	0
4 5	6 7 13 13	Red-brown clay, trace silt and gravel. Dry. (Native).	0.5	0
6		Bottom of boring		
7 8 9 10 11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING Z8

DATE: 7-27-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3 8 10 11	Brown silt, some roots (Topsoil) Brown silt mottled with black sand like material (flyash?).	1.0	0
2	3 5	Black clay (reworked with black sand/ flyash?) mottled with yellow clay. Sample Z8.		0
3	5 7	Red-brown clay, trace gravel. Stiff. (Native).	0.9	0
4	3 5 9 15		1.2	
6		Bottom of boring		

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS

PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING D-4

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1				
2				
3				
4				
5				
6				
7		Auger to 7 feet		
	4	Red-brown to black clay grading to ...		
8	9 17 36	Red-brown clay, trace gravel (Native) Sample from 8.0'-8.5'	0.8	
9	18 22	Sample from 9.0'-9.5' and 10.0'-10.5' (samples tasken from 0-6", 6"-12", and 18"-24" below approximate top of native clay).		
10	31 21		1.6	
11		Bottom of boring		

SURFACE ELEVATION: COMPLETION DEPTH: 11.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING EB

DATE: 7-27-95 LOCATION: Site 2, Location E

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	11 14 19 28	Brown silt and clay (Topsoil). Brown-red silt and gravel (shot rock), little clay.	1.4	0
2	15 9 7 8	increasing clay...	0.8	0
4	10 5 8 8	Red-brown clay, some gravel, little glass fragments. Sample EB.	0.3	0
6	4 4 7 13	Red-brown clay, some mottled black, little gravel. Sample EB. Red-brown clay, trace gravel (Native).	0.9	
8		Bottom of boring * NOTE: This boring corresponds to test pit location E-5 in location E, Site 2 and was requested by the NYSDEC.		

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING HB

DATE: 7-27-95 LOCATION: Site 1, Location H

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	3	Red-brown and black clay, some gravel.	0.7	0
	3	Black sand (flyash?), some brick fragments. Wet. (Located in area of subsurface brick rubble containing perched water - discovered during the test pit study.)		
	6			
2	2			
	4		1.1	0
3	4	Black clay, some mottled red-brown, some brick fragments. Sample HB.		
	10			
4	10			
	8	Red-brown clay, trace gravel (Native).	0.6	
5	12			
	21			
6	21			
		Bottom of boring		
7				
8				
9		* NOTE: This boring was placed in the approximate center of Location H (Site 1) and is a NYSDEC requested boring.		
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING IB

DATE: 7-27-95 LOCATION: Location I, Site 2

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	6 10 12 16	Brown silt, little gravel and roots (Topsoil) Brown silt and gravel, moist.	0.6	0
2	3 6	Brown-black clay, mottled yellow, trace gravel, One inch black sand (flyash?) seam at approximately -3.5 ft. Sample IB.	1.0	0
3	8			
4	8	Red-brown clay, trace gravel (Native).		0
5	7 10 15 20		1.0	
6		Bottom of boring		
7				
8		* NOTE: This boring was placed in the approximate center of Location I, Site 2. It was a NYSDEC requested boring.		
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING A5W

DATE: 7-28-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	7 7 13 14	No recovery.	no recovery	
2	7 5	Black clay, soft, moist to wet, no odor. Sample A5W.		0
3	3 18	Red-brown clay, trace gravel (Native).	1.3	
4		Bottom of boring		
5				
6				
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 4.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING A5N

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	4 5 8 6	Brown clay and gravel Grey-blue sand (salts?) and gravel, little clay. Sample A5N.	0.6	0
2				
3	8 18 11 26	Brown sand and gravel (little recovery)	0.1	
4				
5	4 8 8 12	Red-brown clay, some wood fragments (little recovery).	0.3	
6				
7	6 12 20 36	Black clay, little gravel, moist. Red-brown clay, trace gravel (Native). Dry, stiff. Sample A5NA. ((6.6'-7.2')	1.2	0
8	8 12 22 36	as above. Sample A5NB (8.0'-8.5') and A5NC (8.5'-9.0'). Samples A5N A thru C represent the 0-6", 6"-12" and 18"-24" intervals below thew top of the native clay.	1.8	
9				
10		Bottom of boring		
11				

SURFACE ELEVATION: COMPLETION DEPTH: 10.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING A5S

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	5 5 5 7	Gravel and brown silt, some red-brown clay (Cap). Red-brown clay, mottled black, trace gravel.	0.9	
2	3 4			
3	5	Black coarse sand, flecked white (flyash?), some silt, faint TCE like odor. Sample A5S.	1.1	0
4	4 4	Red-brown clay, mottled black. Soft, moist, no odor		0
5	10 14	Red-brown clay, trace gravel (Native). Stiff, dry.	1.7	
6	13	Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING A5E

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	10 12 14 21	Brown clay and gravel (Cap). Black clay and gravel.	0.5	0
2 3	10 15 7 7	Gravel and blue-white sand (salts?), some silt, little red-brown clay, mottled yellow. Moist. Sample A5E.	0.4	0
4 5	4 6 16 18	Black to red-brown clay. Soft, slightly moist. Red-brown clay, trace gravel (Native). Stiff, dry.	1.0	0
6		Bottom of boring		
7 8 9 10 11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

LOG OF BORING A5SE

DATE: 7-31-95 LOCATION: Site 1

DEPTH	SAMPLING RESISTANCE	DESCRIPTION	RECOVERY (FT)	OVA (PPM)
1	5	Brown clay and gravel (Cap)		
	10	Brown to black clay, some gravel.		
	50/0	Rock	0.5	
2	5	Red-brown to black clay, some silt, trace gravel. Moist.		
3	5	Black clay, some silt and sand. Moist. Sample A5SE.		0
	5		1.5	
	5			
4	5	Black clay, trace gravel. Stiff, dry.		
5	10	Red-brown clay, trace gravel (Native)		
	18		1.1	
	18			
6		Bottom of boring		
7				
8				
9				
10				
11				

SURFACE ELEVATION: COMPLETION DEPTH: 6.0 WATER DEPTH: NA

PROJECT NAME: FMC CORP. TONAWANDA, NEW YORK FACILITY SOIL BORINGS
PROJECT NUMBER: 93C2339 WOODWARD-CLYDE CONSULTANTS

APPENDIX B

LABORATORY DATA SUMMARY FORMS

ADDITIONAL INVESTIGATION

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X1
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459104
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	24

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.3 U

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X2
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459105
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	17

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X3
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455908
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/29/95	% MOISTURE:	20

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.1 J

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X4
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459111
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	14

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X5
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459110
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	17

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	0.5 J

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X6
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460411
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	26

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.4 U
2	11104-28-2	Aroclor-1221	1.4 U
3	11141-16-5	Aroclor-1232	1.4 U
4	53469-21-9	Aroclor-1242	1.4 U
5	12672-29-6	Aroclor-1248	1.4 U
6	11097-69-1	Aroclor-1254	1.4 U
7	11096-82-5	Aroclor-1260	1.4 U

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X7
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460410
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	25

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.3 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X8
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460409
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/03/95	% MOISTURE:	24

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	5.6

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y1
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459102
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	21

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.3 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y2
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459106
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	26

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.4 U
2	11104-28-2	Aroclor-1221	1.4 U
3	11141-16-5	Aroclor-1232	1.4 U
4	53469-21-9	Aroclor-1242	1.4 U
5	12672-29-6	Aroclor-1248	1.4 U
6	11097-69-1	Aroclor-1254	1.4 U
7	11096-82-5	Aroclor-1260	1.4 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y3
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459107
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	25

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.3 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y4
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459108
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	26

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.4 U
2	11104-28-2	Aroclor-1221	1.4 U
3	11141-16-5	Aroclor-1232	1.4 U
4	53469-21-9	Aroclor-1242	1.4 U
5	12672-29-6	Aroclor-1248	1.4 U
6	11097-69-1	Aroclor-1254	1.4 U
7	11096-82-5	Aroclor-1260	6.4

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y5
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459109
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	19

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y6
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460401
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/03/95	% MOISTURE:	14

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	11.0

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y7
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460402
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/03/95	% MOISTURE:	28

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.4 U
2	11104-28-2	Aroclor-1221	1.4 U
3	11141-16-5	Aroclor-1232	1.4 U
4	53469-21-9	Aroclor-1242	1.4 U
5	12672-29-6	Aroclor-1248	1.4 U
6	11097-69-1	Aroclor-1254	1.4 U
7	11096-82-5	Aroclor-1260	0.8 J

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y8
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460404
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	22

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.3 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z1
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459101
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/01/95	% MOISTURE:	24

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.9

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	T1
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459103
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	25

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.0 J

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z2
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455901
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/28/95	% MOISTURE:	22

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.5

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z3
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455902
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/28/95	% MOISTURE:	28

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.4 U
2	11104-28-2	Aroclor-1221	1.4 U
3	11141-16-5	Aroclor-1232	1.4 U
4	53469-21-9	Aroclor-1242	1.4 U
5	12672-29-6	Aroclor-1248	1.4 U
6	11097-69-1	Aroclor-1254	1.4 U
7	11096-82-5	Aroclor-1260	1.4 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z4
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455903
EXTRACTI^N DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/28/95	% MOISTURE:	20

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.6

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z5
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455904
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/28/95	% MOISTURE:	15

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z6
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455905
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/28/95	% MOISTURE:	20

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.3 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z7
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455906
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/28/95	% MOISTURE:	25

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.3 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z8
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455907
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/28/95	% MOISTURE:	25

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	1.3 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5E
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460412
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	18

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	E

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5EDL
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460412
EXTRACTION DATE:	08/02/95	DIL FACTOR:	5.00
ANALYSIS DATE:	08/03/95	% MOISTURE:	18

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	NA
2	11104-28-2	Aroclor-1221	NA
3	11141-16-5	Aroclor-1232	NA
4	53469-21-9	Aroclor-1242	NA
5	12672-29-6	Aroclor-1248	NA
6	11097-69-1	Aroclor-1254	NA
7	11096-82-5	Aroclor-1260	60.0

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5N
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460405
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	15

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.6

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5S
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460408
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	22

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.3 U
2	11104-28-2	Aroclor-1221	1.3 U
3	11141-16-5	Aroclor-1232	1.3 U
4	53469-21-9	Aroclor-1242	1.3 U
5	12672-29-6	Aroclor-1248	1.3 U
6	11097-69-1	Aroclor-1254	1.3 U
7	11096-82-5	Aroclor-1260	E

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5SDL
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460408
EXTRACTION DATE:	08/02/95	DIL FACTOR:	250.00
ANALYSIS DATE:	08/03/95	% MOISTURE:	22

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	NA
2	11104-28-2	Aroclor-1221	NA
3	11141-16-5	Aroclor-1232	NA
4	53469-21-9	Aroclor-1242	NA
5	12672-29-6	Aroclor-1248	NA
6	11097-69-1	Aroclor-1254	NA
7	11096-82-5	Aroclor-1260	2100.0

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	U1
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460407
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	27

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.4 U
2	11104-28-2	Aroclor-1221	1.4 U
3	11141-16-5	Aroclor-1232	1.4 U
4	53469-21-9	Aroclor-1242	1.4 U
5	12672-29-6	Aroclor-1248	1.4 U
6	11097-69-1	Aroclor-1254	1.4 U
7	11096-82-5	Aroclor-1260	E

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	U1DL
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460407
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1000.00
ANALYSIS DATE:	08/03/95	% MOISTURE:	27

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	NA
2	11104-28-2	Aroclor-1221	NA
3	11141-16-5	Aroclor-1232	NA
4	53469-21-9	Aroclor-1242	NA
5	12672-29-6	Aroclor-1248	NA
6	11097-69-1	Aroclor-1254	NA
7	11096-82-5	Aroclor-1260	23000.0

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5SE
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460413
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/03/95	% MOISTURE:	27

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.4 U
2	11104-28-2	Aroclor-1221	1.4 U
3	11141-16-5	Aroclor-1232	1.4 U
4	53469-21-9	Aroclor-1242	1.4 U
5	12672-29-6	Aroclor-1248	1.4 U
6	11097-69-1	Aroclor-1254	1.4 U
7	11096-82-5	Aroclor-1260	16.0

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5W
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459114
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	27

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.4 U
2	11104-28-2	Aroclor-1221	1.4 U
3	11141-16-5	Aroclor-1232	1.4 U
4	53469-21-9	Aroclor-1242	1.4 U
5	12672-29-6	Aroclor-1248	1.4 U
6	11097-69-1	Aroclor-1254	1.4 U
7	11096-82-5	Aroclor-1260	1.4 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5NA
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460406
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	14

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	D4
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459113
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	12

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.1 U
2	11104-28-2	Aroclor-1221	1.1 U
3	11141-16-5	Aroclor-1232	1.1 U
4	53469-21-9	Aroclor-1242	1.1 U
5	12672-29-6	Aroclor-1248	1.1 U
6	11097-69-1	Aroclor-1254	1.1 U
7	11096-82-5	Aroclor-1260	1.1 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y4C
CONC. LEVEL:	MED	LAB SAMPLE ID:	2459112
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	18

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y7A
CONC. LEVEL:	MED	LAB SAMPLE ID:	2460403
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	18

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	2.0

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	EB
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455910
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/29/95	% MOISTURE:	18

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	HB
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455909
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/29/95	% MOISTURE:	16

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	IB
CONC. LEVEL:	MED	LAB SAMPLE ID:	2455911
EXTRACTION DATE:	07/28/95	DIL FACTOR:	1.00
ANALYSIS DATE:	07/29/95	% MOISTURE:	17

CMPD #	CAS Number	PCB COMPOUND	MG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	1.2 U
2	11104-28-2	Aroclor-1221	1.2 U
3	11141-16-5	Aroclor-1232	1.2 U
4	53469-21-9	Aroclor-1242	1.2 U
5	12672-29-6	Aroclor-1248	1.2 U
6	11097-69-1	Aroclor-1254	1.2 U
7	11096-82-5	Aroclor-1260	1.2 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	WATER	SAMPLE ID:	RSB1
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2459117
EXTRACTION DATE:	08/01/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/02/95	% MOISTURE:	NA

CMPD #	CAS Number	PCB COMPOUND	UG/L
1	12674-11-2	Aroclor-1016	0.50 U
2	11104-28-2	Aroclor-1221	0.50 U
3	11141-16-5	Aroclor-1232	0.50 U
4	53469-21-9	Aroclor-1242	0.50 U
5	12672-29-6	Aroclor-1248	0.50 U
6	11097-69-1	Aroclor-1254	0.50 U
7	11096-82-5	Aroclor-1260	0.50 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	WATER	SAMPLE ID:	RSB2
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2460414
EXTRACTION DATE:	08/02/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/03/95	% MOISTURE:	NA

CMPD #	CAS Number	PCB COMPOUND	UG/L
1	12674-11-2	Aroclor-1016	0.50 U
2	11104-28-2	Aroclor-1221	0.50 U
3	11141-16-5	Aroclor-1232	0.50 U
4	53469-21-9	Aroclor-1242	0.50 U
5	12672-29-6	Aroclor-1248	0.50 U
6	11097-69-1	Aroclor-1254	0.50 U
7	11096-82-5	Aroclor-1260	0.50 U

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X6S
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2473104
EXTRACTION DATE:	08/16/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/17/95	% MOISTURE:	14

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	93 U
2	11104-28-2	Aroclor-1221	93 U
3	11141-16-5	Aroclor-1232	93 U
4	53469-21-9	Aroclor-1242	93 U
5	12672-29-6	Aroclor-1248	93 U
6	11097-69-1	Aroclor-1254	93 U
7	11096-82-5	Aroclor-1260	93 U

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	X7S
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2473107
EXTRACTION DATE:	08/16/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/17/95	% MOISTURE:	15

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	94 U
2	11104-28-2	Aroclor-1221	94 U
3	11141-16-5	Aroclor-1232	94 U
4	53469-21-9	Aroclor-1242	94 U
5	12672-29-6	Aroclor-1248	94 U
6	11097-69-1	Aroclor-1254	94 U
7	11096-82-5	Aroclor-1260	690

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y6S
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2473101
EXTRACTION DATE:	08/16/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/17/95	% MOISTURE:	18

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	98 U
2	11104-28-2	Aroclor-1221	98 U
3	11141-16-5	Aroclor-1232	98 U
4	53469-21-9	Aroclor-1242	98 U
5	12672-29-6	Aroclor-1248	98 U
6	11097-69-1	Aroclor-1254	98 U
7	11096-82-5	Aroclor-1260	2800

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y7S
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2466701
EXTRACTION DATE:	08/08/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/09/95	% MOISTURE:	15

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	94 U
2	11104-28-2	Aroclor-1221	94 U
3	11141-16-5	Aroclor-1232	94 U
4	53469-21-9	Aroclor-1242	94 U
5	12672-29-6	Aroclor-1248	94 U
6	11097-69-1	Aroclor-1254	94 U
7	11096-82-5	Aroclor-1260	E

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Y7SDL
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2466701
EXTRACTION DATE:	08/08/95	DIL FACTOR:	100.00
ANALYSIS DATE:	08/10/95	% MOISTURE:	15

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	NA
2	11104-28-2	Aroclor-1221	NA
3	11141-16-5	Aroclor-1232	NA
4	53469-21-9	Aroclor-1242	NA
5	12672-29-6	Aroclor-1248	NA
6	11097-69-1	Aroclor-1254	NA
7	11096-82-5	Aroclor-1260	86000

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	Z6S
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2473106
EXTRACTION DATE:	08/16/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/17/95	% MOISTURE:	25

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	110 U
2	11104-28-2	Aroclor-1221	110 U
3	11141-16-5	Aroclor-1232	110 U
4	53469-21-9	Aroclor-1242	110 U
5	12672-29-6	Aroclor-1248	110 U
6	11097-69-1	Aroclor-1254	110 U
7	11096-82-5	Aroclor-1260	180

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5ES
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2466703
EXTRACTION DATE:	08/08/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/09/95	% MOISTURE:	17

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	96 U
2	11104-28-2	Aroclor-1221	96 U
3	11141-16-5	Aroclor-1232	96 U
4	53469-21-9	Aroclor-1242	96 U
5	12672-29-6	Aroclor-1248	96 U
6	11097-69-1	Aroclor-1254	96 U
7	11096-82-5	Aroclor-1260	780

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	V1
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2466702
EXTRACTION DATE:	08/08/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/09/95	% MOISTURE:	15

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	94 U
2	11104-28-2	Aroclor-1221	94 U
3	11141-16-5	Aroclor-1232	94 U
4	53469-21-9	Aroclor-1242	94 U
5	12672-29-6	Aroclor-1248	94 U
6	11097-69-1	Aroclor-1254	94 U
7	11096-82-5	Aroclor-1260	970

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5NS
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2474201
EXTRACTION DATE:	08/17/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/17/95	% MOISTURE:	16

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	95 U
2	11104-28-2	Aroclor-1221	95 U
3	11141-16-5	Aroclor-1232	95 U
4	53469-21-9	Aroclor-1242	95 U
5	12672-29-6	Aroclor-1248	95 U
6	11097-69-1	Aroclor-1254	95 U
7	11096-82-5	Aroclor-1260	210

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5SBS
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2466704
EXTRACTION DATE:	08/08/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/09/95	% MOISTURE:	14

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	93 U
2	11104-28-2	Aroclor-1221	93 U
3	11141-16-5	Aroclor-1232	93 U
4	53469-21-9	Aroclor-1242	93 U
5	12672-29-6	Aroclor-1248	93 U
6	11097-69-1	Aroclor-1254	93 U
7	11096-82-5	Aroclor-1260	1400

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5SS
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2466705
EXTRACTION DATE:	08/08/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/09/95	% MOISTURE:	17

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	96 U
2	11104-28-2	Aroclor-1221	96 U
3	11141-16-5	Aroclor-1232	96 U
4	53469-21-9	Aroclor-1242	96 U
5	12672-29-6	Aroclor-1248	96 U
6	11097-69-1	Aroclor-1254	96 U
7	11096-82-5	Aroclor-1260	1500

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	SOIL	SAMPLE ID:	A5WS
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2473105
EXTRACTION DATE:	08/16/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/17/95	% MOISTURE:	22

CMPD #	CAS Number	PCB COMPOUND	UG/KG (DRY BASIS)
1	12674-11-2	Aroclor-1016	100 U
2	11104-28-2	Aroclor-1221	100 U
3	11141-16-5	Aroclor-1232	100 U
4	53469-21-9	Aroclor-1242	100 U
5	12672-29-6	Aroclor-1248	340
6	11097-69-1	Aroclor-1254	100 U
7	11096-82-5	Aroclor-1260	490

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NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	WATER	SAMPLE ID:	073095
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2460501
EXTRACTION DATE:	08/04/95	DIL FACTOR:	2.00
ANALYSIS DATE:	08/09/95	% MOISTURE:	NA

UG/L

CMPD #	CAS Number	PCB COMPOUND	
1	12674-11-2	Aroclor-1016	1.00 U
2	11104-28-2	Aroclor-1221	1.00 U
3	11141-16-5	Aroclor-1232	1.00 U
4	53469-21-9	Aroclor-1242	1.00 U
5	12672-29-6	Aroclor-1248	1.00 U
6	11097-69-1	Aroclor-1254	1.00 U
7	11096-82-5	Aroclor-1260	1.00 U

8080PCB - FORM 1

NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	WATER	SAMPLE ID:	RSB3
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2466708
EXTRACTION DATE:	08/09/95	DIL FACTOR:	1.00
ANALYSIS DATE:	08/10/95	% MOISTURE:	NA

CMPD #	CAS Number	PCB COMPOUND	UG/L
1	12674-11-2	Aroclor-1016	0.50 U
2	11104-28-2	Aroclor-1221	0.50 U
3	11141-16-5	Aroclor-1232	0.50 U
4	53469-21-9	Aroclor-1242	0.50 U
5	12672-29-6	Aroclor-1248	0.50 U
6	11097-69-1	Aroclor-1254	0.50 U
7	11096-82-5	Aroclor-1260	0.50 U

APPENDIX C
ANALYTICAL DATA QUALITY REVIEW
ADDITIONAL INVESTIGATION
ANALYTICAL DATA

INTRODUCTION

This appendix presents a data quality review for PCB analyses performed in support of the FMC Tonawanda facility Preliminary Site Assessment (PSA) - Additional Investigation. Analytical services were provided by Nytest Environmental, Inc. (Nytest) of Port Washington, New York. A summary of the number and type of samples analyzed is presented below:

	Investigative Samples	Field Duplicates	Equipment Blanks	MS/MSD[1] Samples
Subsurface Soil	36	2	2	3/3
Surface Soil	9	1	1	2/2

(1) Matrix spike/matrix spike duplicate

Sample analyses followed USEPA SW-846 Method 8080 protocol, as modified by Nytest. This method was modified for subsurface soil samples to achieve detection limits of approximately 1.0 mg/kg (ten times higher than detection limits reported for surface soils).

The following document was used as guidance for the data quality review:

> CLP Organics Review and Preliminary Review. SOP No. HW-6, Revision 8. USEPA Region II. January 1992.

The above "Guidelines" provided the criteria to review. The following items were checked as part of the data quality review:

- Results reporting from secondary dilutions
- Holding Times
- Method blanks and equipment blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate analyses
- Field duplicate sample results
- Overall assessment of data

The following sections present the results of the data quality review.

RESULTS REPORTED FROM SECONDARY DILUTIONS

For samples that required dilutions, part of the review process is to evaluate which set of results (initial or diluted) are considered to be more usable. For this data set, three samples required dilutions for Aroclor 1260.

- Aroclor-1260 results for samples A5E, A5S, U1 (A5S Dup.) and Y7S were noted by Nytest as exceeding the corresponding instruments' linear calibration range. Detected Aroclor-1260 results for these samples were not reported on the corresponding initial sample analysis Form-1s. All four initial sample extracts were diluted and reanalyzed and the diluted Aroclor-1260 concentrations were reported as separate analyses. For these samples, the diluted results for the detected Aroclors were transcribed onto the data summary table (Table 4-1) with a "D" code (result reported from secondary dilution) along with any appropriate qualifiers.

SAMPLE HOLDING TIMES

Per the method protocol, soil samples for PCB analyses are required to be extracted within 14 days of sample collection and aqueous samples require extraction within 7 days from sample collection. Both soil and aqueous extracts require analysis within 40 days of extraction.

Review of the sample collection dates and extraction and analyses dates noted the following extractions were performed outside the required holding time criterion:

Sample	Holding Time[1]	Required Holding Time[1]
A5NS	19 days	14 days
X6S	15 days	14 days
X7S	15 days	14 days
Y6S	15 days	14 days
Z6S	19 days	14 days

[1] From collection to extraction.

The above surface soil samples were archived in the laboratory pending the analysis of corresponding subsurface soil location samples, as such, exceedance of extraction holding times was unavoidable. Due to the relative stability of PCBs, qualification of the associated data was not considered necessary based on the holding time exceedances.

Remaining sample extractions and analyses were completed within holding time requirements.

METHOD BLANKS

Method blank analyses evaluate the existence and magnitude of contamination problems resulting from laboratory activities.

The PCB method blank results associated with these samples were contaminant-free for the target compounds. Therefore, the potential for contamination from laboratory activities was minimal.

EQUIPMENT BLANK SAMPLES

Equipment blanks are used to assess sampling equipment decontamination procedures. Three equipment blank samples were collected during the Additional Investigation (two for subsurface soil samples and one for surface soil samples). The equipment blanks were identified as RSB-1, RSB-2 and RSB-3.

The PCB results for the equipment blank samples were reported as non-detected for the target compounds, and no qualification was required.

SURROGATE SPIKE RECOVERIES

Surrogate compounds are used to evaluate overall laboratory performance for sample preparation efficiency on a per sample basis. The "Guidelines" allow one PCB surrogate recovery (three surrogate compounds per sample) to be outside acceptance criteria provided that the recovery is greater than or equal to 10 percent. The PCB analysis of sample U1 (A5S Dup.) had two outlying surrogate recoveries as shown below:

	Surrogate Recovery[1]		
Sample	TCX (60-150)	DBC (20-150)	DCB (60-150)
U1	--	304	377

(1) Control limits noted in parentheses
TCX Tetrachloro-meta-xylene
DBC Dibutylchlorendate
DCB Decachlorobiphenyl
-- Recovery acceptable

The outlying surrogate recoveries for this sample were caused by interfering PCB peaks which exceeded the instrument's linear calibrated range. Therefore, only non-detected PCB results were reported from the initial analysis of sample U1 and the detected PCB result was reported from a secondary dilution analysis (dilution factor of 1,000). Since the outlying surrogate recoveries indicated a potential high bias, the corresponding non-detected PCB results did not require qualification as estimated. Surrogate recoveries for the diluted analysis of sample U1 could not be quantitated based on the magnitude of the dilution. Per the "Guidelines", qualification of sample data is not required for samples having no surrogate recoveries due to required dilution.

Surrogate recoveries for secondary dilution analyses of samples A5S and Y7 were also not quantifiable based on the magnitude of sample dilutions. Per the "Guidelines", no qualification was required. The initial undiluted surrogate recoveries for these samples were within control limits.

No other sample analyses had outlying surrogate spike recoveries.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) SAMPLES

Samples Z3, Y4, X8, A5SS and Y6S were analyzed as MS/MSD samples for this investigation. These samples were analyzed to evaluate potential matrix effects upon the data. Each sample was spiked with both Aroclors 1016 and 1260.

Aroclor-1260 spike recoveries for samples A5SS and Y6S could not be accurately quantitated since sample concentrations exceeded the spiking by a factor of 4 or more. Remaining Aroclor-1260 and all Aroclor-1016 MS/MSD recoveries and relative percent difference (RPD) values met the laboratory's established acceptance criteria, indicating satisfactory analytical accuracy and precision were achieved.

FIELD DUPLICATES

Field duplicate results are used to evaluate the aggregate sampling and analytical precision. For soil samples, when analytes for both duplicate and sample values are greater than five times the quantitation limit, satisfactory precision is indicated by an RPD less than or equal to 100 percent. Where one or both of the analytes of a field duplicate pair are reported at less than five times the quantitation limit, satisfactory precision is indicated if the field duplicate results agree within 3.5 times the quantitation limit. Field duplicate results that do not meet these criteria may indicate unsatisfactory precision of the results.

Three field duplicate pairs, labeled as A5S/U1, Z1/T1 and A5ES/V1 are associated with the samples from this investigation.

Aroclor-1260 results for field duplicate pair A5S and U1 were the only results that were not in agreement with the specified criteria (RPD value of 167%). Based on the outlying RPD value, Aroclor-1260 results for both samples were qualified as estimated (data qualifier J). The discrepancies between field duplicate sample PCB concentrations most likely resulted from sample heterogeneity.

OVERALL DATA ASSESSMENT

Based on the criteria outlined, it is recommended the PCB results reported for the FMC PSA - Additional Investigation be accepted for their intended use. Acceptable levels of accuracy and precision were achieved except where noted in this appendix. In addition, completeness, defined as the percentage of analytical results which are judged to be valid, including estimated (J) values, was 100 percent, which exceeds the method's historical completeness range of 80 to 85 percent.

Only two sample results from this investigation required qualification. Aroclor-1260 results for samples A5S and U1 were qualified as estimated (data qualifier J) due to low precision between field duplicate sample results.

APPENDIX D

LABORATORY DATA SUMMARY FORMS

REMEDIAL MEASURES

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542203
Client ID: AN

Matrix: Soil Low
Dilution Factor: 20
Sample Date: 10/10/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 78.32

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		2.2	U
Aroclor 1221		2.2	U
Aroclor 1232		2.2	U
Aroclor 1242		2.2	U
Aroclor 1248		2.2	U
Aroclor 1254		2.2	U
Aroclor 1260		32	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5588
Lab Samp ID:A5558801
Client ID: AN2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/18/95
Analysis Date: 10/19/95
Extraction Date: 10/19/95
% Dry Weight: 70.68

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		0.81	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542204
Client ID: ANS

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/10/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 88.89

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.0	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5537
Lab Samp ID:A5553704
Client ID: AANS1

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/17/95
% Dry Weight: 80.37

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.3	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5537
Lab Samp ID:A5553705
Client ID: AANS4

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/17/95
% Dry Weight: 83.60

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		2.0	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5578
Lab Samp ID:A5557801
Client ID: AANS2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/18/95
% Dry Weight: 83.22

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		0.92	J

C00007

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542206
Client ID: AS

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/10/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 82.03

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		0.31	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542217
Client ID: ASS3

Matrix: Soil Low
Dilution Factor: 20
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 84.94

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		2.2	U
Aroclor 1221		2.2	U
Aroclor 1232		2.2	U
Aroclor 1242		2.2	U
Aroclor 1248		2.2	U
Aroclor 1254		2.2	U
Aroclor 1260		54	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5537
Lab Samp ID:A5553703
Client ID: AASS1

Matrix: Soil Low
Dilution Factor: 10
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/17/95
% Dry Weight: 77.39

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.1	U
Aroclor 1221		1.1	U
Aroclor 1232		1.1	U
Aroclor 1242		1.1	U
Aroclor 1248		1.1	U
Aroclor 1254		1.1	U
Aroclor 1260		9.0	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5578
Lab Samp ID:A5557805
Client ID: AASS2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/18/95
% Dry Weight: 83.25

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		5.9	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5455
Lab Samp ID:A5545503
Client ID: AE3

Matrix: Soil Low
Dilution Factor: 50
Sample Date: 10/12/95
Analysis Date: 10/13/95
Extraction Date: 10/12/95
% Dry Weight: 79.87

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		5.0	U
Aroclor 1221		5.0	U
Aroclor 1232		5.0	U
Aroclor 1242		5.0	U
Aroclor 1248		5.0	U
Aroclor 1254		5.0	U
Aroclor 1260		180	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5588
Lab Samp ID:A5558802
Client ID: AE4

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/18/95
Analysis Date: 10/19/95
Extraction Date: 10/19/95
% Dry Weight: 78.17

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		2.0	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5455
Lab Samp ID:A5545504
Client ID: AES5

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/12/95
Analysis Date: 10/13/95
Extraction Date: 10/12/95
% Dry Weight: 83.04

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.3	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5537
Lab Samp ID:A5553707
Client ID: AAES1

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/17/95
% Dry Weight: 83.99

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		0.15	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542201
Client ID: AW2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/10/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 77.17

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.0	U

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542202
Client ID: AWS2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/10/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 82.77

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.1	
Aroclor 1254		1.0	U
Aroclor 1260		0.24	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5537
Lab Samp ID:A5553706
Client ID: AAWS1

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/17/95
% Dry Weight: 80.31

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		0.29	J
Aroclor 1260		1.0	U

METHOD 8080 - POLYCHLORINATED BIPHENYLS **000004**

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542205
Client ID: AB

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/10/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 84.74

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.4	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542215
Client ID: DN3

Matrix: Soil Low
Dilution Factor: 40
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 66.71

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		5.8	U
Aroclor 1221		5.8	U
Aroclor 1232		5.8	U
Aroclor 1242		5.8	U
Aroclor 1248		5.8	U
Aroclor 1254		42	
Aroclor 1260		5.8	U

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5590
Lab Samp ID:A5559001
Client ID: DN4

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/19/95
Analysis Date: 10/20/95
Extraction Date: 10/19/95
% Dry Weight: 76.02

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.0	U

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542216
Client ID: DNS2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 83.71

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		2.4	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5537
Lab Samp ID:A5553701
Client ID: DDNS1

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/17/95
% Dry Weight: 83.18

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		6.2	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5578
Lab Samp ID:A5557808
Client ID: DDNS2

Matrix: Soil
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/18/95
% Dry Weight: 81.98

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		9.7	

METHOD 8080 - POLYCHLORINATED BIPHENYLS **000019**

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542211
Client ID: DS

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/10/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 79.21

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		0.92	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

000020

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542212
Client ID: DSS2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 90.10

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		2.8	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5537
Lab Samp ID:A5553702
Client ID: DDSS1

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/17/95
% Dry Weight: 83.84

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		2.4	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5578
Lab Samp ID:A5557806
Client ID: DDSS2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/18/95
Extraction Date: 10/18/95
% Dry Weight: 84.54

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		4.2	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5578
Lab Samp ID:A5557807
Client ID: DDSS3

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/17/95
Analysis Date: 10/20/95
Extraction Date: 10/19/95
% Dry Weight: 87.80

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		3.1	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

000003

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5644
Lab Samp ID:A5564402
Client ID: DDSS4

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/20/95
Analysis Date: 10/20/95
Extraction Date: 10/20/95
% Dry Weight: 88.39

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		0.20	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542209
Client ID: DE

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 79.30

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		0.75	J
Aroclor 1260		0.81	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542210
Client ID: DES2

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 88.41

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		0.43	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542213
Client ID: DW

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/10/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 77.48

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.5	

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542214
Client ID: DWS

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 86.70

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		0.60	J

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542207
Client ID: DB

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 86.35

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.0	U

METHOD 8080 - POLYCHLORINATED BIPHENYLS

Laboratory: Recra Environmental, Inc. :RECNY
Lab Job No: A95-5422
Lab Samp ID:A5542208
Client ID: DD

Matrix: Soil Low
Dilution Factor: 1
Sample Date: 10/11/95
Analysis Date: 10/12/95
Extraction Date: 10/11/95
% Dry Weight: 86.18

Parameter	Units = MG/KG	Result	Q
Aroclor 1016		1.0	U
Aroclor 1221		1.0	U
Aroclor 1232		1.0	U
Aroclor 1242		1.0	U
Aroclor 1248		1.0	U
Aroclor 1254		1.0	U
Aroclor 1260		1.0	U

APPENDIX E
ANALYTICAL DATA QUALITY REVIEW
REMEDIAL MEASURES
ANALYTICAL DATA

INTRODUCTION

This appendix presents a data quality review for PCB analyses performed in support of the FMC Tonawanda facility Preliminary Site Assessment (PSA) - Remedial Measures Program. Analytical services were provided by Recra Environmental, Inc. (Recra) of Amherst, New York. A summary of the number and type of samples analyzed is presented below:

	Investigative Samples	Field Duplicates	MS/MSD[1] Samples
Subsurface Soil	13	1	1/1
Surface Soil	20	1	1/1

[1] Matrix spike/matrix spike duplicate

Sample analyses followed USEPA SW-846 Method 8080 protocol, as modified by Recra. This method was modified to achieve detection limits of approximately 1.0 mg/kg.

The following document was used as guidance for the data quality review:

> CLP Organics Review and Preliminary Review. SOP No. HW-6, Revision 8. USEPA Region II. January 1992.

The above "Guidelines" provided the criteria to review. The following items were checked as part of the data quality review:

- Results reporting from secondary dilutions
- Holding Times
- Method blanks and equipment blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate analyses
- Field duplicate sample results
- Overall assessment of data

The following sections present the results of the data quality review.

RESULTS REPORTED FROM SECONDARY DILUTIONS

For samples that required dilutions, part of the review process is to evaluate which set of results (initial or diluted) are considered to be more usable. For this data set, five samples required dilutions for Aroclors 1254 or 1260.

- Samples AN, ASS3, DN3, AE3, and AASS1 were analyzed at dilutions for PCBs since screening of samples prior to final analysis indicated target compounds in excess of the instrument's linear calibration range. For these samples, results of ten times more concentrated extracts were not analyzed and reported by Recra.

SAMPLE HOLDING TIMES

Per the method protocol, soil samples for PCB analyses are required to be extracted within 14 days of sample collection; extracts require analysis within 40 days of extraction.

Review of the sample collection dates and extraction and analyses dates noted that all sample extractions and analyses were performed within the method holding time requirements.

METHOD BLANKS

Method blank analyses evaluate the existence and magnitude of contamination problems resulting from laboratory activities.

The PCB method blank results associated with these samples were contaminant-free for the target compounds. Therefore, the potential for contamination from laboratory activities was minimal.

EQUIPMENT BLANK SAMPLES

Equipment blank samples are used to assess sampling equipment decontamination procedures. All samples were collected using dedicated sampling equipment, and as such, the collection of equipment blank samples was not required.

SURROGATE SPIKE RECOVERIES

Surrogate compounds are used to evaluate overall laboratory performance for sample preparation efficiency on a per sample basis. The "Guidelines" allow one PCB surrogate recovery (two surrogate compounds per sample) to be outside acceptance criteria provided that the recovery is greater than or equal to 10 percent. All samples which did not require dilution had surrogate spike recoveries that met the acceptance criteria presented in the "Guidelines". This indicates that the laboratory preparation procedure was satisfactory.

Five of the samples were analyzed at dilution factors which ranged from 10 to 50. For these samples, a ten times more concentrated extract was not analyzed and the surrogate spike compounds were diluted below quantifiable concentrations. The subject samples include: AN, ASS3, DN3, AE3, and AASS1. Per the "Guidelines", qualification of sample data is not required when surrogate spike compounds are diluted beyond quantifiable concentrations.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) SAMPLES

Samples A5 and DDNS1 were analyzed as MS/MSD samples for this program. MS/MSD samples were analyzed to evaluate potential matrix effects upon the data. Each sample was spiked with Aroclor 1242.

All MS/MSD recoveries and relative percent difference (RPD) values met the laboratory's established acceptance criteria, indicating satisfactory analytical accuracy and precision were achieved.

FIELD DUPLICATES

Field duplicate results are used to evaluate the aggregate sampling and analytical precision. For soil samples, when analytes for both duplicate and sample values are greater than five times the quantitation limit, satisfactory precision is indicated by an RPD less than or equal to 100 percent. Where one or both of the analytes of a field duplicate pair are reported at less than five times the quantitation limit, satisfactory precision is indicated if the field duplicate results agree within 3.5 times the quantitation limit. Field duplicate results that do not meet these criteria may indicate unsatisfactory precision of the results.

Two field duplicate pairs, labeled as AANS1/AANS4 and DB/DD are associated with the samples from the Remedial Measures Program.

All target PCB results reported for the field duplicate pairs are in agreement with the above criteria.

OVERALL DATA ASSESSMENT

Based on the criteria outlined, it is recommended the PCB results reported for the FMC PSA - Remedial Measures Program be accepted for their intended use. Acceptable levels of accuracy and precision were achieved except where noted in this appendix. In addition, completeness, defined as the percentage of analytical results which are judged to be valid, including estimated (J) values, was 100 percent, which exceeds the method's historical completeness range of 80 to 85 percent.

APPENDIX F

WASTE MANIFESTS

REMEDIAL MEASURES

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074031019 50 33
2. Page 1 of 1
Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 555180 3

B. Generator's ID [illegible]

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD980769847
C. State Transporter's ID: 10258P(NY)
D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
NIAGARA CITY, NY 14107
10. US EPA ID Number: NYD049836679
G. State Facility's ID
H. Facility's Phone (716) 786-8221

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	DT	17588	K	EPA STATE [illegible]
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above
a
c
b 8142-76 PJ
d

K. Handling Codes for Wastes Listed Above
a L
c
b
d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/10/95
ESTIMATED WEIGHT: 17588 kg
EMERGENCY PHONE: (716) 876-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BRUCE R. WARNER
Signature: FOR FMC Bruce R Warner
Mo. Day Year: 1 9 1 0 9 5

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Tom Polley
Signature: Tom Polley
Mo. Day Year: 1 0 1 0 9 5

18. Transporter 2 (Acknowledgement or Receipt of Materials)
Printed/Typed Name
Signature
Mo. Day Year

FACILITY

19. Discrepancy Indication Space
corrected weight 17799 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: KATHY VILLENEUVE
Signature
Mo. Day Year: 1 0 1 0 9 5

NY B 555180 3

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA No. NYD074033101 Manifest Document No. 95034	2. Page 1 of 1 — Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845		A. State Manifest Document No. NY B 555181 2
4. Generator's Phone (716) 879-8300		B. Generator's ID [illegible] AVE TONAWANDA, NY [illegible]
5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP	6. US EPA ID Number: NYD980755947	C. State Transporter's ID 10256PNY
		D. Transporter's Phone (716) 827-7200
7. Transporter 2 (Company Name)	8. US EPA ID Number	E. State Transporter's ID
		F. Transporter's Phone ( )
9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107	10. US EPA ID Number: NYD049836679	G. State Facility's ID [illegible]
		H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	DT	17297	K	EPA; STATE B007
b.					EPA; STATE
c.					EPA; STATE
d.					EPA; STATE

J. Additional Descriptions for Materials listed Above

a

b 8443 7 6089

K. Handling Codes for Wastes Listed Above

a L

b

c

d

15. Special Handling Instructions and Additional Information

CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/10/95
ESTIMATED WEIGHT: 17297 kg
EMERGENCY PHONE: (716) 879-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Mo. Day Year
BRUCE R. WARNER	FOR FMC Bruce R Warner	10 10 95

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo. Day Year
KENNETH JOYAL	Kenneth Joyal	10 10 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo. Day Year

19. Discrepancy Indication Space

actual read 17400 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo. Day Year
EILEEN CARTER	Eileen Carter	10 10 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

(518) 457-7362.

NY B 555181 2

COPY 5—Gener[illegible] by TSD facility

Signature [illegible] Title [illegible] Date 10/10/95

DWM-2001A (5/93)

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. NYD074033101 Manifest Document No. 95035
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-8300

A. State Manifest Document No. NY B 555182 1

B. Generator's ID [illegible] AVE TONAWANDA, NY [illegible]

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD986978947

C. State Transporter's ID AD2591 NY

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	DT	14210	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above

a c

b d 821437703

K. Handling Codes for Wastes Listed Above

a L c

b d

15. Special Handling Instructions and Additional Information

CWM CODE: BL 1357
OUT OF SERVICE DATE: 12/10/95
ESTIMATED WEIGHT: 14210 kg
EMERGENCY PHONE: (716) 879-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BRUCE R. WARNER | Signature: FOR FMC Bruce R Warner | Mo. Day Year 1 0 0 9 5

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name: WILLIAM SINCLAIR | Signature: William Sinclair | Mo. Day Year 1 0 1 0 9 5

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name | Signature | Mo. Day Year

FACILITY

19. Discrepancy Indication Space

act. rcd. 15704K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: EILEEN CARTER | Signature: Eileen Carter | Mo. Day Year 1 0 1 0 9 5

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 555182 1

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

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Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074033101 / 50361
2. Page 1 of 1
Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

4. Generator's Phone (716) 876-6300

A. State Manifest Document No. NY B 555183 9

B. Generator's ID [redacted]

5. Transporter 1 (Company Name): HAZKAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD080760847
C. State Transporter's ID 10251Put
D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836679
G. State Facility's ID
H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, NA 2315, PG III	001	DT	18124	K	EPA / STATE [redacted]
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above
a
b
c
d 81437705

K. Handling Codes for Wastes Listed Above
a L
b
c
d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/16/95
ESTIMATED WEIGHT: 18124 kg
EMERGENCY PHONE: (716) 876-6300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WAGNER	FOR FMC Bruce R Wagner	10	10	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
Robert E. Kapp	Robert E. Kapp	10	10	95

18. Transporter 2 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space
Wt. rec'd. 18107K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
EILEEN CARTER	Eileen Carter	10	10	95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

COPY 6—Generator—retained by generator

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 555183 9

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039. Expires 9-30-94

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD074033101
   Manifest Document No.: 95037
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

GENERATOR

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-0300

A. State Manifest Document No. NY B 555184 8

B. Generator's ID: 37 SAWYER AVE TONAWANDA, NY 14150

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD980769947

C. State Transporter's ID: 10203 NY

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID:

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	DT	19813	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above

a | c

b | d

K. Handling Codes for Wastes Listed Above

a L | c

b | d

15. Special Handling Instructions and Additional Information
    CWM CODE: BL 1357
    OUT OF SERVICE DATE: 10/10/95
    914E7704
    ESTIMATED WEIGHT: 19813 kg
    EMERGENCY PHONE: (716) 879-0300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BRUCE R. WARNER
Signature: FOR FMC Bruce R Warner
Mo. Day Year: 10 10 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
    Printed/Typed Name: FRANK G. SAWYER
    Signature: Frank G. Sawyer
    Mo. Day Year: 10 10 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)
    Printed/Typed Name:
    Signature:
    Mo. Day Year:

FACILITY

19. Discrepancy Indication Space
    act. recd 19858K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
    Printed/Typed Name: EILEEN CARTER
    Signature: Eileen Carter
    Mo. Day Year: 10 10 95

NY B 555184 8

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. NYD074033101 Manifest Document No. 95038
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845

4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 555185 7

B. Generator's ID 37 SAWYER AVE TONAWANDA, NY 14150

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD980769947

C. State Transporter's ID 10258P (NY)

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	DT	18805	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a
b
c
d

K. Handling Codes for Wastes Listed Above
a L
b
c
d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/10/95
ESTIMATED WEIGHT: 18805 kg
EMERGENCY PHONE: (716) 876-8300 (24 HOURS)
7413771

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: BRUCE R. WARNER | Signature: FOR FMC Bruce R Warner | Mo. Day Year 10 10 95

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Tom Polley | Signature: Tom Polley | Mo. Day Year 10 10 95

18. Transporter 2 (Acknowledgement of Receipt of Materials)
Printed/Typed Name | Signature | Mo. Day Year

19. Discrepancy Indication Space
actual recd 19015 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Kathy Villeneuve | Signature: Kathy Vill | Mo. Day Year 10 11 95

NY B 555185 7

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

48-14-1 (3/89)—71

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074033101 95021

2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 8166096

B. Generator's ID 37 SAWYER AVE TONAWANDA, NY 14150

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number: NYD980769947

C. State Transporter's ID 1026PNY

D. Transporter's Phone (716 827-7200)

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	DT	21247	K	EPA STATE 9007
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

a

b

c

d

K. Handling Codes for Wastes Listed Above

a: L c: b: d:

15. Special Handling Instructions and Additional Information

CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/10/95
ESTIMETED WEIGHT: 21247 kg
EMERGENCY PHONE: (716) 876-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER		10	10	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
Kenneth Joyal		10	10	95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space
21283 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
Kathy Villafuerte		10	11	95

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N Y Dept. of Environmental Conservation (518) 457-7362.

NY B 8166096

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

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48-14-1 (3/89)—71

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074033101 / 95040

2. Page 1 of 1 — Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address:
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

4. Generator's Phone (716) 876-8300

A. State Manifest Document No.: NY B 8166087

B. Generator's ID: 37 SAWYER AVE TONAWANDA, NY 14150

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number: NYD086076934 7

C. State Transporter's ID: 1025 [illegible]

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address:
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number: NYD004936679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	07	19813	K	EPA STATE B007
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

a

b

c

d

K. Handling Codes for Wastes Listed Above

a: L c: b: d:

15. Special Handling Instructions and Additional Information

CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/10/95
ESTIMETED WEIGHT: 19813 kg
EMERGENCY PHONE: (716) 876-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name	Signature	Mo. Day Year
BRUCE R. WARNER	[signature]	10 10 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo. Day Year
[illegible]	[signature]	

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo. Day Year

FACILITY

19. Discrepancy Indication Space

19.77K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo. Day Year
ELLEN CARTER	Ellen Carter	10 11 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

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In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 8166087

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039. Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD007403310195041 / 1

2. Page 1 of

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

A. State Manifest Document No.: NY B 8166078

B. Generator's ID: 37 SAWYER AVE TONAWANDA, NY 14150

4. Generator's Phone (716) 876-8300

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number: NYD980760947

C. State Transporter's ID: 10537PNY

D. Transporter's Phone ( )

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID: 716 827-7200

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	DT	22600	K	EPA STATE 9007
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

a

b

c

d

K. Handling Codes for Wastes Listed Above

a: L

b:

c:

d:

15. Special Handling Instructions and Additional Information

CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/10/95
ESTIMETED WEIGHT: 22600 kg
EMERGENCY PHONE: (716) 876-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER		10	10	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
		10	10	95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo	Day	Year

FACILITY

19. Discrepancy Indication Space: 22132K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
		10	17	95

NY B 8166078

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator—mailed to TSD facility

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074031019502 / 1

2. Page 1 of

Information in the shaded areas is not required by Federal Law

3. Generator's Name and Mailing Address
FNC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240

4. Generator's Phone (716 876-8300)

A. State Manifest Document No.: NY B 8166159

B. Generator's ID: 37 SAWYER AVE. TONAWANDA, NY 14150

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number: NYD980760947

C. State Transporter's ID: 102032 NY

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER RD.
MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone: (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN2315, PGIII	001	DT	18850	K	EPA / STATE 9007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a
b
c
d

K. Handling Codes for Wastes Listed Above
a: L
b:
c:
d:

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/10/95
ESTIMATED WEIGHT: 18850 KG
EMERGENCY PHONE: (716) 876-8300 24 HRS.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name	Signature	Mo	Day	Year
BRUCE R. WARNER		10	10	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
		10	10	95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space
18951 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
KEITH VILLENEUVE		10	11	95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 8166159

46-14-1 (3/89)—71

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074033101 / 9504 3

2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 345
BUFFALO, NY 14240-0845

A. State Manifest Document No.: NY B 8166105

B. Generator's ID: 37 SAWYER AVE TONAWANDA, NY 14150

4. Generator's Phone (716) 876-8300

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number: NYD980760947

C. State Transporter's ID: 10203PNY

D. Transporter's Phone ( )

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID: 716 827-7200

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	DT	13811	K	EPA STATE 8007
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

GENERATOR

J. Additional Descriptions for Materials listed Above
a
b
c
d

K. Handling Codes for Wastes Listed Above
a: L
b:
c:
d:

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/11/95
ESTIMATED WEIGHT: 13811 kg
EMERGENCY PHONE: (716) 876-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations

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Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER		10	11	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
Frank Smith	Frank Smith	10	11	95

18 Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space
13907K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
KATHY VILLEVIEUE	Kathy Vill	10	11	95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

COPY to be returned by TSD facility

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 8166105

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: N Y D 0 7 4 0 3 3 1 0 1 — Manifest Document No.: 9 5 0 4 4
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 508435 2
B. Generator's ID 37 SAWYER AVENUE TONAWANDA, NY 14150-7717

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: N Y D 9 8 0 7 6 9 9 4 7

C. State Transporter's ID 11RC0GNY
D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: N Y D 0 4 9 8 3 6 6 7 9

G. State Facility's ID
H. Facility's Phone (716) 754-8231

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	13121	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above: a / b / c / d

K. Handling Codes for Wastes Listed Above: a L / b / c / d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357 ESTIMATED WEIGHT: 13121 kg
OUT OF SERVICE DATE: 10/10/95 EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: BRUCE R.WARNER — Signature: FOR FMC Bruce R Warner — Mo Day Year: 10 12 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Kenneth Joyce — Signature: Kenneth Joyce — Mo. Day Year: 10 12 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space: 13898 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: [illegible] Villeneuve — Signature: [illegible] — Mo. Day Year: 10 13 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

NY B 508435 2

Dept. of Environmental Conservation (518) 457-7362.

COPY 2 – Generator State – mailed by generator

48-14-1 (3/89)—7I

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD074033101 — Manifest Document No.: 95045
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

GENERATOR

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 508436 1
B. Generator's ID: SAWYER AVENUE, TONAWANDA, NY 14150-7717

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD980769947

C. State Transporter's ID: PDPW 9 NY
D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID
H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	14746	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above: a / b / c / d

K. Handling Codes for Wastes Listed Above: a L / b / c / d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1367 — ESTIMATED WEIGHT: 14746 kg
OUT OF SERVICE DATE: 10/10/95 — EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)
81437390

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: BRUCE R. WARNER — Signature: Bruce R. Warner — Mo. Day Year: 10 12 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Ted Kyre — Signature: Ted Kyre — Mo. Day Year: 10 12 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space
actual wt 14887 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Kathi Villeneuve — Signature: Kathi Vil — Mo. Day Year: 10 13 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

NY B 508436 1

...call the National Response Center (800) 424-8802 and the N.Y. Dept of Environmental Conservation (518) 457-7362.

COPY 5—Generator-mailed by TSD facility

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD074033101 — Manifest Document No.: 95046 — 2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845

4. Generator's Phone (716) 879-6300

A. State Manifest Document No. NY B [redacted]

B. Generator's ID [redacted]

5. Transporter 1 (Company Name): HAZMAT ENVIR. GROUP

6. US EPA ID Number: NYD980769947

C. State Transporter's ID [redacted]

D. Transporter's Phone ([redacted]

7. Transporter 2 (Company Name):

8. US EPA ID Number:

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	17388	K	EPA / STATE [redacted]
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above: a / b / c / d

K. Handling Codes for Wastes Listed Above: a L / b / c / d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1367 ESTIMATED WEIGHT: 17388 kg
OUT OF SERVICE DATE: 10/11/95 EMERGENCY TELEPHONE: 716-879-6300 (24 HOURS)
8142799S

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BRUCE R. WARNER — Signature: FOR FMC Bruce R. Warner — Mo. Day Year: 10 12 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Tom Polley — Signature: Tom Polley — Mo. Day Year: 10 12 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)
Printed/Typed Name: — Signature: — Mo. Day Year:

FACILITY

19. Discrepancy Indication Space
actual read 17736K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: EILEEN CARTER — Signature: Eileen Carter — Mo. Day Year: 10 16 95

NY B 508437 9

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

COPY 6—Generator—retained by generator

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD074033101 Manifest Document No.: 95547
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-8300

A. State Manifest Document No. NY B 508438 8

B. Generator's ID [illegible]

5. Transporter 1 (Company Name): CHEMICAL WASTE MANAGEMENT
6. US EPA ID Number: [illegible]

C. State Transporter's ID NY PA5320

D. Transporter's Phone (716) 754-8231

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	09089	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above: a / b / c / d

K. Handling Codes for Wastes Listed Above: a L / b / c / d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1367 8193847 ESTIMATED WEIGHT: 9089 kg
OUT OF SERVICE DATE: 10/19/95 EMERGENCY TELEPHONE: 716-879-8300 (24 HOURS)
SR# 256899-1-2 K10344

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: BRUCE R. WARNER — Signature: FOR FMC Bruce R Warner — Mo. Day Year: 10 19 95

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: GARTH WILSON — Signature: Garth Wil — Mo. Day Year: 10 19 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)
Printed/Typed Name — Signature — Mo. Day Year

19. Discrepancy Indication Space: actual recd 9362 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: KATH VILLENEUVE — Signature: Kath Vill — Mo. Day Year: 10 24 95

GENERATOR / TRANSPORTER / FACILITY

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 508438 8

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

48-14-1 (3/89)—71

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD074031019 — Manifest Document No.: 5048
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-0300

A. State Manifest Document No. NY B 508441 5

B. Generator's ID [illegible]

5. Transporter 1 (Company Name): Chemical Waste Management
6. US EPA ID Number: ILD098262661

C. State Transporter's ID NYTL4072

D. Transporter's Phone ([illegible]) [illegible]

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 11523	K	EPA; STATE B007
b.					EPA; STATE
c.					EPA; STATE
d.					EPA; STATE

J. Additional Descriptions for Materials listed Above
a
b GMY22029
c
d

K. Handling Codes for Wastes Listed Above
a L
b
c
d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357 ESTIMATED WEIGHT: 11523 kg
OUT OF SERVICE DATE: 10/18/95 EMERGENCY TELEPHONE: 716-879-0300 (24 HOURS)
SR# 256200-1

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name	Signature	Mo. Day Year
BRUCE R. WARNER	FOR FMC Bruce R Warner	10 20 95

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo. Day Year
ROBERT J. DUNN	Robert J. Dunn	10 20 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo. Day Year

19. Discrepancy Indication Space
[illegible] 11757K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo. Day Year
EILEEN CARTER	Eileen Carter	10 20 95

NY B 508441 5

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NY State Dept. of Environmental Conservation (518) 457-7362.

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

46-141 (3/89)—71

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No: NYD074032101 — Manifest Document No: 55649 1

2. Page 1 of — Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

4. Generator's Phone (716) 876-6300

A. State Manifest Document No. NY B 508442 4

B. Generator's ID [illegible]

5. Transporter 1 (Company Name): CHEMICAL WASTE MANAGEMENT
6. US EPA ID Number: ILD980920881
C. State Transporter's ID: NY4202Y
D. Transporter's Phone (716) [illegible]

7. Transporter 2 (Company Name)
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679
G. State Facility's ID
H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NA, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CW	11967	K	EPA STATE 9007
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above
a
b
c
d

K. Handling Codes for Wastes Listed Above
a: L
b:
c:
d:

15. Special Handling Instructions and Additional Information
CWM CODE: NA 2315
ESTIMATED WEIGHT: 11967 kg
OUT OF SERVICE DATE: 10/18/95
EMERGENCY TELEPHONE: 716-876-6300 (24 HOURS)
SR #256198-1
8143892

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER	FOR FMC Bruce R Warner	10	20	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
Dennis J. Hoover	Dennis J. Hoover	10	20	95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space
Actual Prod 12048 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
KATHY VILLANUEVA	Kathy Villanueva	10	20	95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

COPY 8—Generator—retained by Generator

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dep't of Environ. Con. (518) 457-7362.

NY B 508442 4

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. NYD074033101 Manifest Document No. 95050
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-0300

A. State Manifest Document No. NY B 508443 3

B. Generator's ID [illegible], [illegible] NY [illegible]-7717

5. Transporter 1 (Company Name): CHEMICAL WASTE MANAGEMENT
6. US EPA ID Number: ILL 0 0 0 9 2 0 2 6 8 1

C. State Transporter's ID NY [illegible]

D. Transporter's Phone (716) 754-8231

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 13003	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above

a | c

b 8143[illegible]504 | d

K. Handling Codes for Wastes Listed Above

a L | c

b | d

15. Special Handling Instructions and Additional Information

CWM CODE: NL 2357 ESTIMATED WEIGHT: 13003 kg

OUT OF SERVICE DATE: 10/20/95 EMERGENCY TELEPHONE: 716-879-0300 (24 HOURS)

SERVICE REQUEST # 256204-1

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: BRUCE R. WARNER — Signature: FOR FMC Bruce R. Warner — Mo. Day Year: 10 20 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name: ROBERT J. [illegible] — Signature: [illegible] — Mo. Day Year: 10 20 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

actual [illegible] 13390 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: [illegible] VIKENFUWE — Signature: [illegible] — Mo. Day Year: 10 24 95

NY B 508443 3

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

COPY 5—Generator-mailed by TSD facility

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. NYD074033101 — Manifest Document No. 95505
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-0300

A. State Manifest Document No. NY B 508444 2

B. Generator's ID [illegible] TONAWANDA, NY [illegible]

5. Transporter 1 (Company Name): CHEMICAL WASTE MANAGEMENT
6. US EPA ID Number: ILD000672691

C. State Transporter's ID [illegible]

D. Transporter's Phone ([illegible]) [illegible]

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 12748	K	EPA STATE [illegible]
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

a

b

c

d

K. Handling Codes for Wastes Listed Above

a

b

c

d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357 ESTIMATED WEIGHT: 12748 kg
OUT OF SERVICE DATE: 10/20/95 EMERGENCY TELEPHONE: 716-879-0300 (24 HOURS)
S.R. #256202 2143479

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford

Printed/Typed Name: BRUCE R. WARNER — Signature: For FMC Bruce R. Warner — Mo. Day Year: 10 20 95

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Dennis J. Hoover — Signature: [signature] — Mo. Day Year: 10 20 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)
Printed/Typed Name: — Signature: — Mo. Day Year:

19. Discrepancy Indication Space
actual weight 12492 K Item K-1

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Kathi Villafune — Signature: Kathi Vill — Mo. Day Year: 10 24 95

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 508444 2

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No: NYD074033101 — Manifest Document No: 9502
2. Page 1 of: 1
Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

4. Generator's Phone (716) 878-8300

A. State Manifest Document No. NY B 425318 4

B. Generator's ID [illegible]

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD986076947
C. State Transporter's ID [illegible]
D. Transporter's Phone ([illegible])

7. Transporter 2 (Company Name)
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836679
G. State Facility's ID
H. Facility's Phone (716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. NA, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 12848	K	EPA STATE [illegible]
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above
a
b
c
d

K. Handling Codes for Wastes Listed Above
a: L
b:
c:
d:

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357
ESTIMATED WEIGHT: 12848 kg
OUT OF SERVICE DATE: 10/20/95
EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)
SERVICE REQUEST # 256501-1
81138451

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER	FOR FMC Bruce R. Warner	10	23	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
TOM POLLEY	Tony Polley	10	23	95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space
Actual Pen of 13436 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
KEVIN VILLENEUVE	Kevin Vill	10	23	95

NY B 425318 4

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 6—Generator—retained by generator.

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD074033101 — Manifest Document No.: 95053
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-0300

A. State Manifest Document No. NY B 425216 7

B. Generator's ID [illegible] [illegible], NY 14150-7717

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD980769947

C. State Transporter's ID [illegible]

D. Transporter's Phone (716) 823-7200

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 13048	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above: a, b, c, d

K. Handling Codes for Wastes Listed Above: a L; b; c; d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357 — ESTIMATED WEIGHT: 13048 kg
OUT OF SERVICE DATE: 10/20/95 — EMERGENCY TELEPHONE: 716-879-0300 (24 HOURS)
SERVICE REQUEST # 256501-2
214 3452

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: BRUCE R. WARNER — Signature: FOR FMC Bruce R Warner — Mo. Day Year: 10 23 95

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Timothy Hiley — Signature: [signature] — Mo. Day Year: 10 23 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)
Printed/Typed Name — Signature — Mo. Day Year

19. Discrepancy Indication Space: actual weight 13490 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Kathy Villeneuve — Signature: Kath Vill — Mo. Day Year: 10 23 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

In case of emergency or spill immediately call the National Re... Cen... (...0) 424 ... and th... Dept. ...ironm... Conse... (518 ...362.

NY B 425216 7

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No / Manifest Document No.: NYD074033101 9605 4 1
2. Page 1 of — Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address:
PMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

A. State Manifest Document No.: NY B 425218 5

B. Generator's ID: [illegible]

4. Generator's Phone (716) 876-8300

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number: NYD980760947

C. State Transporter's ID

D. Transporter's Phone (716) 827-7260

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID PD1949 NY

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address:
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836979

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 12449	K	EPA STATE [illegible]
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

a

b

c

d

K. Handling Codes for Wastes Listed Above

a	c
K	
b	d

15. Special Handling Instructions and Additional Information

CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/20/95
S.R.# 256502-1

ESTIMATED WEIGHT: 12449 kg
EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)
8142129

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER	For PMC Bruce R Warner	10	24	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
TED Kyle	Ted Kyle	10	24	95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space

Actual Received 11993K Item K-LT

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
KATH VILENEUS	Kath Vil	10	24	95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

NY B 425218 5

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074033101 / 05055 1
2. Page 1 of — Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
A. State Manifest Document No.: NY B 425217 6
B. Generator's ID: [illegible]

4. Generator's Phone (716) 876-8300

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYB980769847
C. State Transporter's ID: 1035 NY
D. Transporter's Phone (716) 821-7600

7. Transporter 2 (Company Name)
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836979
G. State Facility's ID
H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	12013	K	EPA / STATE [illegible]
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a
b
c
d

K. Handling Codes for Wastes Listed Above
a: K
c:
b:
d:

15. Special Handling Instructions and Additional Information
CWM CODE: RL 1357
ESTIMATED WEIGHT: 12013 kg
OUT OF SERVICE DATE: 10/20/95
EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)
S.R.#256502-2

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford

Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER	FOR FMC Bruce R Warner	10	24	95

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
KENNETH JOYAL	Kenneth Joyal	10	24	95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

19. Discrepancy Indication Space
actual weight 12193K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
KEVIN VILLENEUVE	[signature]	10	24	95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

NY B 425217 6

COPY B—Generator's Copy

COPY B—Generator's Copy

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD074033101 — Manifest Document No.: 95656
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 425215 8

B. Generator's ID: 37 [illegible] AVENUE, TONAWANDA, NY 14150-7717

5. Transporter 1 (Company Name): CHEMICAL WASTE MANAGEMENT
6. US EPA ID Number: IL0099202681

C. State Transporter's ID: NY-PA5320

D. Transporter's Phone (716) 754-8231

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 11759	K	EPA ____ STATE B007
b.					EPA ____ STATE
c.					EPA ____ STATE
d.					EPA ____ STATE

J. Additional Descriptions for Materials listed Above

a PCB's

b

c

d

K. Handling Codes for Wastes Listed Above

a K

b

c

d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357 ESTIMATED WEIGHT: 11759 kg
OUT OF SERVICE DATE: 10/20/95 EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)
S.R.# 256624 81438730

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: BRUCE R. WARNER — Signature: FOR FMC Bruce R Warner — Mo. Day Year: 10 24 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: ROBERT McMANN — Signature: Robert McMann — Mo. Day Year: 10 24 95

18. Transporter 2 (Acknowledgement of Receipt of Materials)
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space
Actual Rec'd 11984K ITEM K - L

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: KATHI VILLENEUVE — Signature: Kathi Vill[illegible] — Mo. Day Year: 10 25 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept of Environmental Conservation (518) 457-7362.

NY B 425215 8

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-94

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (516) 457-7362.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No: NYD074033101 — Manifest Document No.: 95057
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-8300

A. State Manifest Document No. NY B 425315 7
B. Generator's ID 37 SAWYER AVENUE TONAWANDA, NY 14150-7717

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD980769947

C. State Transporter's ID [illegible]
D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID
H. Facility's Phone (716) 754-8231

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 12567	K	EPA; STATE B007
b.					EPA; STATE
c.					EPA; STATE
d.					EPA; STATE

J. Additional Descriptions for Materials listed Above: a; b; c; d

K. Handling Codes for Wastes Listed Above: a [K]; b [ ]; c [ ]; d [ ]

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357
ESTIMATED WEIGHT: 12567 kg
OUT OF SERVICE DATE: 10/20/95
EMERGENCY TELEPHONE: 716-879-8300 (24 HOURS)
S.R.#256562-1
81438634

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford

Printed/Typed Name: BRUCE R. WARNER — Signature: FOR FMC Bruce R. Warner — Mo. Day Year: 10 25 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Kenneth Joyal — Signature: Kenneth Joyal — Mo. Day Year: 10 25 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)
Printed/Typed Name: — Signature: — Mo. Day Year:

FACILITY

19. Discrepancy Indication Space
Actual Rec'd 12683 K
Item K. [L]

20. Facility Owner or Operator. Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Kathy Villeneuve — Signature: Kathi Vil — Mo. Day Year: 10 25 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator—mailed by TSD facility
COPY 8—Generator—retained by generator

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYB074033101995 8

2. Page 1 of: 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 645, BUFFALO, NY 14240-0845

A. State Manifest Document No.: NY B 425316 6

B. Generator's ID: 87 [illegible] AVENUE, TONAWANDA, NY [illegible]

4. Generator's Phone (716) 876-8300

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number: NYD986769847

C. State Transporter's ID

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID: 701W1 NY

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107

10. US EPA ID Number: NYD049638678

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	12467 ESTIMATE	K	EPA STATE [illegible]
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

a | c

b | d

K. Handling Codes for Wastes Listed Above

a: [ ] c: [ ]

b: [ ] d: [ ]

15. Special Handling Instructions and Additional Information

CWM CODE: BL 1357 ESTIMATED WEIGHT: 12467 kg

OUT OF SERVICE DATE: 10/20/95 EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)

S.R.#256562-2

10/30/95

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford

Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER	FOR FMC Bruce R Warner	10	25	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
ED Kyrs	Ed Kyrs	10	25	95

18. Transporter 2 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space: Item K-LL 27980P / 12692K

20. Facility Owner or Operator. Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
EILEEN CARTER	Eileen Carter	10	25	95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5 – Generator-retained by Facility

COPY 8 – Generator-retained by Generator

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (516) 457-7362.

NY B 425316 6

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. NYD074033101 Manifest Document No. 95059
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 879-0300

A. State Manifest Document No. NY B 425317 5
B. Generator's ID 87 SAWYER AVENUE TONAWANDA, NY 14150-7797

5. Transporter 1 (Company Name): Hazmat Environmental Group
6. US EPA ID Number: NYD980769947

C. State Transporter's ID 10395 (NY)
D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID
H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 12776	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above: a, b, c, d

K. Handling Codes for Wastes Listed Above: a L; b; c; d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357 ESTIMATED WEIGHT: 12776 kg
OUT OF SERVICE DATE: 10/20/95 EMERGENCY TELEPHONE: 716-879-0300 (24 HOURS)
S.R.#258734-1
2143000

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: BRUCE R. WARNER — Signature: FOR FMC Bruce R Warner — Mo. Day Year: 10 31 95

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: Tom Polley — Signature: Tom Polley — Mo. Day Year: 10 31 95

18. Transporter 2 (Acknowledgement of Receipt of Materials)
Printed/Typed Name — Signature — Mo. Day Year

19. Discrepancy Indication Space
actual load 13172 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Kathy Villeneuve — Signature: Kathi Vill — Mo. Day Year: 10 31 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

In case of emergency or spill immediately call the N... Res... Cente... 424-... nd the Dept. ...ironm... ...onse... (516) ...362.

NY B 425317 5

48-14-1 (3/89)—11

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD074023101 — Manifest Document No.: 95060
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 425319 3

B. Generator's ID 37 SAWYER AVENUE TONAWANDA, NY 14150-7717

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD980769947

C. State Transporter's ID 11306 NY

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID 11305 NX

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 12394	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above

a | c

b | d

K. Handling Codes for Wastes Listed Above

a DWL | c

b | d

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357 — ESTIMATED WEIGHT: 12394 kg
OUT OF SERVICE DATE: 10/20/95 — EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)
S.R.#256734-2
81439001

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name	Signature	Mo. Day Year
BRUCE R. WARNER	FOR FMC Bruce R Warner	10 31 95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo. Day Year
GENE WALENTYNOWICZ	Gene Walentynowicz	10 31 95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo. Day Year

FACILITY

19. Discrepancy Indication Space
Actual Rcv'd 12465 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo. Day Year
KATHI VILLENEUVE	Kathi Vil	10 31 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074033101 / 95061

2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

A. State Manifest Document No.: NY B 425320 2

B. Generator's ID 37 [illegible]
TONAWANDA, NY 14150-7717

4. Generator's Phone (716) 876-8300

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number: NYD986769947

C. State Transporter's ID 1993 [illegible]

D. Transporter's Phone (716) 821-7208

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number: NYD049836979

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	11041	K	EPA STATE 9007
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

K. Handling Codes for Wastes Listed Above: a. L c. b. d.

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1987
ESTIMATED WEIGHT: 11041 kg
OUT OF SERVICE DATE: 10/20/95
EMERGENCY TELEPHONE: 716-876-8500 (24 HOURS)
S.R.# 257412-1
8143907

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations

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Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER	FOR FMC Bruce R. Warner	11	01	95

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
TOM POLLEY	Tom Polley	11	01	95

18. Transporter 2 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

19. Discrepancy Indication Space
Actual Rec'd 11403 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
KARA VILLENEUVE	Kara Villeneuve	11	01	95

NY B 425320 2

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5 - [illegible]

48-14-1 (3/89)—7f

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved. OMB No 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. / Manifest Document No.: NYD074033161 95062
2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address: FMC CORPORATION, P.O. BOX 845, BUFFALO, NY 14240-0845
4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 508445 1

B. Generator's ID 37 SAWYER AVENUE TONAWANDA, NY 14150-7717

5. Transporter 1 (Company Name): HAZMAT ENVIRONMENTAL GROUP
6. US EPA ID Number: NYD980769947

C. State Transporter's ID 11105P KY.

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: CWM CHEMICAL SERVICES, INC., 1550 BALMER ROAD, MODEL CITY, NY 14107
10. US EPA ID Number: NYD049836679

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 10524	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above

a　　　c

b　　　d

K. Handling Codes for Wastes Listed Above

BAW L　a [B]　c [ ]

b [ ]　d [ ]

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357　　ESTIMATED WEIGHT: 10524 kg
OUT OF SERVICE DATE: 10/20/95　　EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)
S.R.# 257412-2　　8113 7073

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations

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Printed/Typed Name: BRUCE R. WARNER　Signature: FOR FMC Bruce R. Warner　Mo. Day Year: 11/01/95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: EUGENE WALENTYNOWICZ　Signature: [signature]　Mo. Day Year: 11/01/95

18. Transporter 2 (Acknowledgement of Receipt of Materials)
Printed/Typed Name　Signature　Mo. Day Year

FACILITY

19. Discrepancy Indication Space
Actual rec'd 10324K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: KATHY VILLENEUVE　Signature: Kath Vil　Mo. Day Year: 11/01/95

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 508445 1

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5—Generator-mailed by TSD facility

40-14-1 (3/89)—71

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. NYD074033101 — Manifest Document No. 85063 — 2. Page 1 of 1

Information in the shaded areas is not required by Federal Law.

3. Generator's Name and Mailing Address
FMC CORPORATION
P.O. BOX 845
BUFFALO, NY 14240-0845

4. Generator's Phone (716) 876-8300

A. State Manifest Document No. NY B 508446 9

B. Generator's ID [illegible] TONAWANDA, NY 14150-7717

5. Transporter 1 (Company Name) HAZMAT ENVIRONMENTAL GROUP

6. US EPA ID Number NYD980769847

C. State Transporter's ID 047101 (NY)

D. Transporter's Phone (716) 827-7200

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER ROAD
MODEL CITY, NY 14107

10. US EPA ID Number NYD041836879

G. State Facility's ID

H. Facility's Phone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NA, POLYCHLORINATED BIPHENYLS, MIXTURE, 9, UN 2315, PG III	001	CM	ESTIMATE 17125	K	EPA STATE 9007
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

a

b

c

d

K. Handling Codes for Wastes Listed Above

a. BRW L 5

c.

b.

d.

15. Special Handling Instructions and Additional Information
CWM CODE: BL 1357
OUT OF SERVICE DATE: 10/20/95
S.R.# 257412-3
ESTIMATED WEIGHT: 17125 kg
EMERGENCY TELEPHONE: 716-876-8300 (24 HOURS)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations

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Printed/Typed Name	Signature	Mo.	Day	Year
BRUCE R. WARNER	FOR FMC Bruce R. Warner	1	10	95

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year
[illegible]	[illegible]	1	10	95

18. Transporter 2 (Acknowledgement or Receipt of Materials)

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space
Broken seal 16946 K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
EILEEN CARTER	Eileen Carter	11	01	95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY 5 – Generator-mailed by TSD facility

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the Dept. of Environmental Conservation (518) 457-7362.

NY B 508446 9

APPENDIX G

DOCUMENTATION ON SOURCES OF BACKFILL MATERIAL

REMEDIAL MEASURES

October 4, 1995

I·W·S·S

Rich Wise
FMC

Dear Rich:

The on site clay was brought from an excavation of a pond at 2625 Bedell Road on Grand Island. It was also brought from a stockpile at IWSS 201 Ganson street yard. Clay was excavated from virgin ground of clean property.

If you have any questions, please do not hesitate to call me.

Sincerely,
Bhavesh Kandar

T.S.M.

INTEGRATED WASTE SPECIAL SERVICES, INC.
201 Ganson Street • Buffalo, NY 14203 • (716) 852-2345 • FAX (716) 852-1757
Offices In: Rochester, New York, Chicago, Detroit, Philadelphia, Binghamton, Albany, Pittsburgh, Houston

October 11, 1995

Rich Wise
FMC

Mr. Wise:

This letter is in regards to the information requested as to the origins of the clay from Ganson Street. The clay in question originated from a new building foundation at Roswell Park in downtown Buffalo.

If you have any further questions, please feel free to call me.

Bhavesh Kamdar/mds

INTEGRATED WASTE SPECIAL SERVICES, INC.
201 Ganson Street • Buffalo, NY 14203 • (716) 852-2345 • FAX (716) 852-1757
Offices In: Rochester, New York, Chicago, Detroit, Philadelphia, Bingnamton, Albany, Pittsburgh, Houston