

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE ADMINISTRATOR

88 JUN 30 P 2: 59

IN THE MATTER OF)
BOLIDEN METECH, INC.,) Docket No. TSCA-I-87-1097
Respondent)

1. The obtaining of samples for testing during the investigation conducted on April 25, 1986 was not an unreasonable search and seizure in violation of the Fourth Amendment.
2. Complainant's testing procedures were appropriate and valid in that regulations provide for measurement and detection of PCBs by "any scientifically acceptable method." 40 C.F.R. § 761.20. The tests performed by complainant were reliable.
3. It is not always necessary to take a representative sample to prove a violation of PCB regulations.
4. Procedures for taking samples as set out in TSCA inspection manual and SW-846 are guidelines and not mandatory on inspectors. Failure to follow sample collection procedure not fatal and does not destroy the validity of samples.
5. Complainant not obligated to prove that PCBs were released into the surrounding soil; it is not obligated to prove a portion of an allegation which is concluded to be irrelevant, immaterial and unnecessary.

INITIAL DECISION

By: Frank W. Vanderheyden
Administrative Law Judge

Dated: June 30, 1989

Appearances:

For Complainant:

Timothy L. Williamson, Esquire
Assistant Regional Counsel
U.S. Environmental Protection
Agency
Region I
J.F. Kennedy Federal Building
Boston, Massachusetts 02203

For Respondent:

Cynthia A. Lewis, Esquire
Kenneth S. Kaufman, Esquire
Beveridge & Diamond, P.C.
Suite 700
1350 I Street, N.W.
Washington, D.C. 20005

INTRODUCTION

This is a proceeding brought pursuant to Section 16 of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2615, to assess civil penalties for violations of regulations promulgated thereunder. The U.S. Environmental Protection Agency (sometimes complainant or EPA) in its administrative complaint alleges two violations or counts against Boliden Metech, Inc. (respondent). The first concerns illegal disposal of polychlorinated biphenyls (PCBs) in violation of 40 C.F.R. § 761.60(a)(1). This section provides:

(a) PCBs. (1) Except as provided in paragraphs (a)(2), (3), (4), and (5) of this section, PCBs at concentrations of 50 ppm or greater must be disposed of in an incinerator which complies with § 761.70.

The second count involves alleged unlawful storage for disposal of PCBs in violation of 40 C.F.R. § 761.65(b)(1). With regard to the storage for disposal of PCBs at concentrations of 50 ppm (parts per million) or greater and PCB Items with PCB concentrations of 50 ppm or greater, the aforementioned section of the regulations provides:

(b) Except as provided in paragraph (c) of this section, after July 1, 1978, owners or operators of any facilities used for the storage of PCBs and PCB Items designated for disposal shall comply with the following requirements:

(1) The facilities shall meet the following criteria:

(i) Adequate roof and walls to prevent rain water from reaching the stored PCBs and PCB Items;

(ii) An adequate floor which has continuous curbing with a minimum six inch high curb. The floor and curbing must provide a containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container stored therein or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored therein, whichever is greater;

(iii) No drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area;

(iv) Floors and curbing constructed of continuous smooth and impervious materials, such as Portland cement concrete or steel, to prevent or minimize penetration of PCBs; and

(v) Not located at a site that is below the 100-year flood water elevation.

Complainant seeks a penalty of \$25,000 and \$15,000 for the first and second counts, respectively.

In its answer respondent denied the alleged violations, contested the amount of the penalty, and requested a hearing. On January 8, 1988^{1/} respondent served a motion to exclude from evidence certain proposed exhibits of complainant and a supporting memorandum of points and authorities. Respondent's motion was denied in an order dated February 16.

To be determined here is whether or not the alleged violations are supported by the preponderance of the evidence.^{2/} "Preponderance of the evidence" is that degree of relevant evidence which a reasonable mind, considering the record as a whole, might accept as sufficient to support a conclusion that the matter asserted is more likely to be true than not true.

All proposed findings of fact and conclusions of law inconsistent with this decision are rejected by the undersigned Administrative Law Judge (ALJ).

^{1/}Unless indicated otherwise, all dates hereinafter are for the year 1988. Concerning respondent's exhibits, reference to page numbers are to paginated numbers in those exhibits where this method is employed.

^{2/}The applicable section of the Consolidated Rules of Practice, 40 C.F.R. § 22.24, provides, in pertinent part, that: "Each matter in controversy shall be determined by the Presiding Officer upon a preponderance of evidence."

FINDINGS OF FACT

Based upon a review of the evidence these are the findings of fact.^{3/}

Respondent is engaged in the business of shredding, sampling, and characterizing computer parts and other materials so that valuable metals and other substances can be reclaimed from them by other companies through pyrometallurgical refining and other techniques. (Joint Exhibit (Jt. Ex.) 1; Tr. 367). Respondent is a subsidiary of Boliden, Inc., a Stanford, Connecticut company, which owns 100 percent of its capital stock. It employs approximately 152 employees, including officers, has four operating plants in the United States, and has projected annual sales, as of March 23, 1987, of forty-five million dollars. (Ex. C21, Tr. 365). Respondent owns a facility on Allens Avenue in Providence, Rhode Island, where the operations described above take place. (Jt. Ex. 1). The facility is approximately 13 acres in size, about half of which is enclosed by a fence. The balance of the property is under the Providence

^{3/}The findings necessarily embrace an evaluation of the credibility of witnesses testifying upon particular issues. This involves more than merely observing the demeanor of a witness. It also encompasses an evaluation of his or her testimony in light of its rationality or internal consistency and the manner in which it blends with other evidence. Wright & Miller, Federal Practice and Procedure: Civil, § 2586 (1971).

separates out the ferrous metal portion. The ferrous material is not sampled for PCBs. It is stockpiled and sold to steel mills without further processing. The remaining non-ferrous shredded materials (hereinafter "product") passes through a bulk sampling device which automatically cuts the product stream at timed intervals (stream sampling) to create a sample equal to ten percent of the product parcel from which it came. The balance of that product parcel is piled on the facility's grounds until it is shipped to respondent's customers, who then remove the precious metals content from the product. Additional, and more refined processing, not relevant to the issues in this proceeding, is conducted by respondent. The process summarized above consists of approximately 15 to 20 steps and takes from eight to twelve weeks to complete, from initial shredding to final assay of a homogenous representative sample. (Ex. C17 at 3; Tr. 370-82, 385).

At present, the only materials processed are computer mainframe or computer subassembly type materials. These materials are referred to as electronic equipment, which is distinguishable from electrical equipment. Respondent conceded that it sometimes processes electrical equipment but not as a parcel of electrical equipment. Currently, more than 95 percent of the computer parts are purchased by respondent from six

Harbor. The southern side of the facility is bordered by a stream. The northern side of the facility is bordered by a large parking lot. (Jt. Ex. 1, Ex. R41; Tr. 24, 385-86, 476). That portion of the facility located between Allens Avenue and Providence Harbor is completely enclosed by a six-foot high chain-link fence. This site contains both buildings and equipment, including one brick building used for maintenance purposes, a small office trailer, a structure housing the conveyors and separation and sampling equipment, truck scale, shredder, motor housing "building," and various material handling equipment. In addition, the fenced-in portion of the facility contains piles of shredded and unshredded material. Under normal circumstances there are 10 to 15 piles of material on the site at any one time. However, as of the date of the hearing, there were roughly 20 such piles of material. Sometimes piles are stored near the fence. (Tr. 23-24, 385-88, 444).

Respondent recaptures the precious metal content of original equipment, manufacturing rejects or scrap. By way of background, a summary of respondent's operations is as follows: After the materials are unloaded and inspected, they are shredded when a sufficient quantity has accumulated. The shredder granulates the material into pieces no greater than approximately three inches in diameter. The shredded materials are then moved by conveyor through a system which magnetically

major manufacturers, and some material from the federal government. For some years in the recent past, the Allens Avenue facility has purchased and received "white goods" (such as refrigerators, stoves, washers, dryers, and municipal trash) electronic and other product from scrap/junk dealers, telephone switching equipment, catalytic converters, certain electrical equipment and capacitors. (Ex. C17 at 3; Tr. 367-69, 400-01, 403, 407, 432, 453, 454-57).

The materials shredded by the Allens Avenue facility arrive by trailer truck. These shipments have included capacitors. (Ex. C17; Tr. 453-54, 457). At the facility the shipment of material is inspected for obvious items not wanted as well as large pieces of metal not capable of being shredded. Before 1987, respondent did not attempt to separate capacitors of any kind out of materials that arrived at the Allens Avenue facility by truck. Respondent processes large numbers of small non-PCB tantalum capacitors. This type of capacitor is generally found on the circuit board of a computer, the largest of which measures up to one inch long by a half inch in diameter, and usually does not contain any liquid. In January or February of 1987, respondent initiated voluntarily a visual inspection program to separate suspected PCB capacitors from the incoming materials. Prior to inspection for capacitors respondent does not claim

that it retrieved and segregated any of them that may have contained PCBs. The inspection program was described by respondent as "our first step" in an effort to prevent PCB contamination. The material is inspected when it arrives, is moved, and is processed. During the period of visual inspections, respondent examined other capacitors suspected of containing PCBs. These inspections revealed markings on the capacitors stating "Do Not Contain PCBs" or "No PCBs Contained." Respondent looks for PCB marks in addition to "things that are not marked at all that we assume contain PCBs." Respondent also inspects for large capacitors. However, it is unable to claim that it has identified and removed all capacitors suspected of containing PCBs, whether before or after implementation of the inspection program. (Ex. C17; Tr. 371-72, 455, 458-60, 470, 478, 505-07). Respondent's witness and its Vice-President of Manufacturing, David N. Carroll (Carroll), stated that there are "old oil-filled" capacitors in a drum at the facility. These "electrical capacitors" were removed from inspected shipments of material to the facility made during the past year (i.e., since January or February 1987). However, since initiating this inspection and removal process, some PCB capacitors were found recently, but Carroll did not know if there were PCBs in these capacitors. Respondent's witness John D. Reposa (Reposa), Plant Manager of the shredding

operation at the facility, stated that at least one of three capacitors stored in the drum are "PCB-bearing" and have the warning "Contains PCB Oil" affixed to them. These capacitors are stored in a 55 gallon drum, with a double plastic liner and identified as containing potentially PCBs. (Tr. 365, 459-462, 470, 478-79, 506).

The piles of shredded and unshredded materials at the facility vary in size from 20 to 3,000 tons. They average 15 to 20 feet in height and measure approximately 10 to 50 feet in diameter at their base, and are not protected by structures with roofs, walls, floors, and continuous curbing. (Exs. C11-14, 16; Tr. 24, 71, 159, 167, 338, 443). The piles are placed generally within the enclosed area of the facility, and space at the facility is at a premium due to the large amount of material in storage. At some point in time material has been piled on every portion of the facility's property. On the surrounding perimeter there was no evidence of soil continuing beyond the premises that is clearly discernible. That is, there was not a sandy beach or layer on the contiguous parcel that would allow one to distinguish visibly and easily between that site and the native material. (Tr. 23, 387, 443, 662).

At the rear of the facility next to Providence Harbor, at least one pile of product had been deposited up against the chain-link fence, causing the fence to bulge out away from the facility and some of the material to pass through the fence onto the rip-rap.^{4/} On or around April 25, 1986, product had spilled through the fence onto the rip-rap at the rear of the facility and this material was contiguous with that of the pile inside the fence. (Ex. C2, C9; Tr. 24-26, 444). Respondent keeps the materials it receives from different suppliers in separate piles and mixes them together, if at all, only when it ships shredded product to its customers. The composition of the product piles differ from one pile to another, and can be considered heterogeneous. Even within a single pile, the shredded product is not of uniform composition, may be stratified into layers to some degree, and may be of varying density. The piles generally contain materials that possess the appearance and consistency of soil. (Tr. 90, 91, 207, 388-89, 486, 508-09, 533, 569-70, 661, 664, 689).

^{4/}The rip-rap is a loose assemblage of broken stones (e.g., boulders) erected in water or on soft ground as a foundation to prevent erosion. Webster's II New Riverside University Dictionary (1984 edition).

On April 25, 1986, John P. Leo (Leo), a Hazardous Waste Engineer with the Rhode Island Department of Environmental Management (DEM), visited the Allens Avenue facility after 4:30 p.m. He did not enter the facility because the gate was locked and nobody was present. Leo proceeded through the parking lot, not owned by respondent and adjacent to respondent's property, to the rear of the facility next to Providence Harbor. While standing on the rip-rap between the fence and Providence Harbor, Leo observed that a large pile of scrap metal or ground up material was "actually pushing against the fence" and some of it had spilled through and beyond the fence. He returned to his official state vehicle to pick up a pint sample jar, and then went back to the rip-rap and collected a jar full of "material that had gone through the fence." At the time of the sampling Leo was on the rip-rap approximately three feet away from the water. None of the material sampled was on the inside of the fence, and he used the jar itself to scoop up the sample. The pile adjacent to the material from which a sample was taken was estimated to be less than six feet away from the river and from 12 to 17 feet high. Leo believed PCBs were present because the pile smelled of trichlorobenzenes. (Exs. R41, C2; Tr. 22-28, 40).

The sample was kept overnight in the trunk of the DEM vehicle. Leo delivered it personally to the New England Testing Laboratory, Inc. (NETL), a contract laboratory for the State of Rhode Island, on Saturday, April 26, 1986. This conflicts with NETL's certificate of analysis for the DEM sample in that NETL states that the sample was received on April 25, 1986. (Ex. C1; Tr. 40). The inconsistency exists because NETL took the "sample date" and used that as the "date received." (Tr. 40). Upon his arrival at NETL, Leo transferred custody of the sample to NETL and requested analysis for PCBs and selenium. On May 14, 1986, NETL issued a Certificate of Analysis to DEM. It found a concentration of 201 ppm of PCBs and 0.013 ppm of selenium to be present. The certificate states that NETL's test method employed "Appropriate approved procedures to support State Hazardous Waste Regulations and/or USEPA Hazardous Waste and including 40 C.F.R. Part 261 and 136." On June 25, 1986, Leo drafted an inter-office memorandum to Alicia Good, DEM, Division of Air and Hazardous Materials. He described briefly the April 25, 1986 visit and recommended immediate action to prevent leaching from and flooding of the piles. (Exs. C1, C2; Tr. 27-29, 32-33, 36, 43-44).

A copy of NETL's test results of the April 25, 1986 sample was not communicated to respondent until September 17, 1986. (Tr. 44, 392, 481-82). On that date, Leo, Thomas Epstein (Epstein), and Mark Alexander (Alexander), also employees of DEM, arrived at the respondent's facility to conduct a hazardous waste inspection. They notified Reposa it was suspected that one or more piles of shredded "scrap" contained PCBs. After entry was initially refused, respondent agreed to let DEM visually inspect the facility but not take any samples until the following day when a representative for respondent could be present. There is a conflict concerning how the samples were obtained: Reposa testified that during the walk-through Leo performed a "smell test" at roughly seven or eight piles. That is he "would walk up to a pile of material, pick it up with his hand and sniff it." In his inter-office memorandum of October 15, 1986 to Epstein, Alexander states that Leo "upon visual inspection, noted sites for possible sampling the following day." (Ex. C5; Tr. 56, 481-82).

On September 18, 1986, DEM inspected the facility pursuant to the agreement reached the prior day. Participants from DEM in the inspection included Beverly Migliori (Migliori), Leo and Alexander. John L. Meyer (Meyer), a respondent consultant, and

Reposa accompanied DEM during the inspection. After presenting their credentials, DEM collected samples; it was looking particularly for PCBs. Sixteen samples were taken from seven piles of product. Sample four, designated as BM#4A and BM#4B, was subdivided because the pile consisted of two separate loads. (Ex. C24; Tr. 86). Exhibit C24 contains two pages of hand-drawn sketches representing the respondent's facility with the sampling points marked on it and the time. (Tr. 68-71). Each oval or rectangle shape represented a pile, and the symbol attempts to depict, to some degree, the size of same. (Tr. 69, 71, 73). Of these samples, half were splits or duplicates which Leo gave to Meyer. Migliori testified that although one spot from each pile was sampled (except for BM#4A and BM#4B), two discrete samples were taken rather than dividing one sample in half. Meyer testified that Leo filled Meyer's own sample jars using several methods, including the above method, and by filling one jar and then pouring half of it into Meyer's jar. The size of the sample jars is also in dispute. Migliori testified that pint jars were used, but Meyer stated that one-quart jars were employed. The sampling was carried out by Leo, who returned to piles identified on September 17, 1986. (Jt. Ex. 1, R9, C5, C24; Tr. 55-58, 60, 86, 87, 481, 483, 530-31, 534, 539).

Migliori testified that Leo would approach a pile, brush off any of the outside material, scoop product from the pile into the jar, and repeat the process with a second jar from the same location. Meyer would chose one of the jars, which were then capped and labelled. Migliori testified that she did not know how Leo determined which piles to sample and where; that she did not see Leo pick up and discard possible samples due to their smell; that Leo did not use his hands, a spatula or trowel to pick up the samples; and that none of the DEM representatives climbed up the piles. (Tr. 58, 60, 88, 89, 90). Respondent's witnesses Reposa and Meyer, however, differed significantly with, and expanded upon Migliori's description, particularly Leo's sampling activity. They emphasized that Leo did not take samples from a standard location on each pile, but instead removed product and took samples from varying heights on the pile. Further, Leo selected the samples by smell. (Tr. 483, 485, 535-36). Although PCBs are noted for their odorless, colorless nature, Leo believes their presence can be detected by the presence of a carrier solvent. Meyer confirmed that a "musky odor" was observed in at least one of the samples selected by Leo. (Tr. 58-60, 88-90, 534-36, 483, 485). The version of respondent's witnesses is more credible than that of Migliori and it is found that Leo engaged in a sampling procedure based primarily upon the material's smell.

On September 18, 1986, the sixteen samples (eight from Leo and eight from Meyer) were taken for PCB analysis to Rhode Island Analytical Laboratories (RIAL), a contract laboratory in Warwick, Rhode Island. With two exceptions, the PCB concentration for each sample exceeded 50 ppm. In the certificates of analyses the dates reported are October 3, 1986 and October 9, 1986, which are the dates the document leaves the laboratory's possession. RIAL used the methodology specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, U.S. EPA, SW-846, July 1982, Second Edition." Meyer was prompted to call RIAL because a week had elapsed since the laboratory received the samples. Paul Ullocic, a technician, informed Meyer that RIAL experienced difficulties in processing the samples and several tests had to be performed in order to obtain consistent results. (Exs. C3, R9; Tr. 61, 536, 541, 545-47, 551-52).

On October 10, 1986, DEM issued an immediate compliance order against respondent. The basis for this order was the sampling performed on September 18, 1986. Among the order's findings of fact are that nine of ten samples indicated PCB contents in excess of 50 ppm, and that the scrap piles bordering on the water were without any cover or containment. Thomas Cahill (Cahill), president and principal engineer of T.H.

Cahill & Associates, witness for respondent, was retained by the latter in October 1986 to complete the sampling plan and perform the necessary site work pursuant to the compliance order and consent agreement. On October 24, 1986, Cahill visited the site to assist respondent in defining the problem brought out by DEM. The DEM order required respondent to submit a sampling plan capable of identifying the presence of any PCB-contaminated materials, equipment, and soils owned or controlled by respondent in addition to investigating any potential off-site leaching. The consent agreement (agreement), infra, contained similar parameters for the sampling plan. With the help of Cahill, respondent developed a sampling plan to investigate whether PCBs that may be contained in the piles could be leaching from the piles and entering the surrounding ground and surface water. (Exs. C4, R18; Tr. 47, 50, 64, 404, 407, 662-64).

Respondent and DEM entered into the agreement on or about December 5, 1986, pursuant to which the former agreed to do the following: (1) Inform all persons coming onto the facility of the terms and conditions of the agreement; (2) Permit DEM access to the facility for sampling or investigatory purposes under state law; (3) Take appropriate action to protect company personnel from contact with any PCBs determined to be present on the site; (4) Cover with an impervious material existing

product piles to prevent any PCBs that may be contained in such piles from leaking or running off onto the ground or into the adjacent waters of Rhode Island by no later than December 31, 1986; (5) Submit a sampling plan designed to identify the presence of any PCB-contaminated equipment and soil to DEM for review and approval; (6) Implement such plan following DEM approval; (7) Not to add any additional product to the existing product piles; (8) Export certain materials in accordance with the conditions listed in the non-waste determination letter; and (9) As an interim measure until the sampling plan's results are available, cover and store "all additional shredded product" to prevent rain or stormwater from running through such products. (Ex. C6).

Respondent was cooperative in its meeting with DEM to discuss the agreement, and it complied substantially with the conditions specified therein. However, since December 31, 1986 it has failed to comply fully with the coverage requirement stated in paragraph 4 of the agreement. This paragraph implies a continuing obligation on respondent to securely and effectively cover the piles of product existing on December 5, 1986. Carroll testified that respondent did cover the product with an impervious material. (Tr. 75-84, 101-111, 394-400).

On December 18, 1986, Leo and Joan Jouzaitis (Jouzaitis), an employee of the U.S. EPA's Office of Pesticides, Boston, Massachusetts, performed an inspection of the respondent's facility. Jouzaitis issued to Reposa a Notice of Inspection and TSCA confidentiality notice. The three proceeded through the facility to the pile which had been sampled previously by Leo on April 25, 1986. A sample of material characterized as "soil" by Jouzaitis was taken from underneath the tarp by using a tongue depressor to scrape up approximately four ounces of material. The sample was then bottled and identified. Jouzaitis later took a "soil" sample of similar size in a similar manner from a location described as "midlot" on respondent's property. She attempted to clarify the exact location of the sampling. Exhibit C19 states that this location was approximately 20 feet from the nearest pile of product. Reposa testified that this was a "turn point" for trucks loading ships. Carroll noted that at some prior point in time a pile had been placed over this area of the facility. A circuit board was removed from one of the facility's piles. Split or duplicate samples were not requested by Reposa. Notwithstanding, such samples were apparently given to Reposa. (Exs. C7-C10, C17; Tr. 131, 154, 156-58, 166, 169, 173-74, 179-80, 202, 206, 390, 489, 492, 496-97). Jouzaitis determined that the samples were of "soil"

based on her experience and the "soil's" color, consistency, particle composition and size, and density. Reposa was of the view that the surface matter depicted in Exhibit C10 (photograph of base of pile where it meets ground) was product and "looks like a lot of metal and a little bit dirt." He also opined that, with regard to Exhibit C16 (photograph of vacant area where piles stored) dirt was underneath a layer of product which was four to six inches thick. Carroll was of a mind that the layer of shredded material varies from one foot to three feet in depth. (Ex. R7; Tr. 230-35, 391, 490, 499, 611-15, 685-86). The evidence is in conflict on the soil/product question. The preponderance of the evidence, however, supports the finding that the two "soil samples" Jouzaitis collected consisted of a mixture of product and soil.

The samples were sealed by Jouzaitis, and stored in a locked unrefrigerated file cabinet at the EPA office in Boston, Massachusetts, for a period of two to three weeks. While it is recommended that extracts be stored in vials under refrigeration if there is an extended period of time until they are analyzed, PCBs are relatively stable and not likely to degrade when kept in a sealed container. (Tr. 174-77, 324, 607, 630). The two "soil" samples were sent to EPA's National Enforcement Investigation Center (NEIC) in Denver, Colorado, for PCB analysis. The circuit board was not forwarded to NEIC because it was lost

during that storage period. NEIC received by Express Mail the two samples on January 7, 1987, along with a "soil blank" which is an empty bottle or container. The samples were received under official custody seals and chain of custody record forms. Arturo Palomares logged them into the laboratory, completed the chain of custody record forms, and stored the samples in a locked refrigerator in the laboratory. (Exs. C18, C25; Tr. 174-77, 208-09).

On January 14, 1987, John Ungvarsky removed the samples from the refrigerator and broke their seals. (Ex. C25). On January 22, 1987, extracts of these samples were taken using the extraction method The Determination of Polychlorinated Biphenyls in Transformer Fluid and Waste Oils, EPA-600/4-81-045 (September 1982), the preferred method for determining PCBs in waste oils, as adapted to analyze soil samples. (Ex. C25, Attachment 3; Tr. 261-264, 322). Kenneth Wang, a chemist at NEIC, testified that this method is altered by Method for Organochlorine Pesticides in Soil and Sediment. PCBs are not mentioned in Section 12 of this modifying extraction procedure as one of the compounds that may be individually determined under this procedure. However, under Table IV, Aroclors 1242 and 1248 are listed as chlorinated insecticides capable of being recovered under this procedure. (Ex. R39, at 1, 18).

This procedure may in turn be modified by Extraction of Solids for Priority Pollutant Pesticides. The extraction procedure in turn has been modified in that sonication instead of vigorous shaking is applied to the sample. (Ex. R40 at 1). The NEIC has established this method of testing for PCBs based on its experience over the past eight years in "running" soil samples, and that after analyzing thousands of samples a method is developed. PCBs, however, are not an organochlorine pesticide, but are a type of organic chlorine. The EPA has published test procedures for evaluating solid wastes within the context of Section 3001 of the Resource Conservation and Recovery Act; and includes a method for determining the concentration of certain PCBs in groundwater, liquid, and solid sample matrices, described as "Method 8080." This method is applicable to hazardous waste samples where both pesticides and PCBs are sought to be analyzed. (Ex. R4, R39, R40; Tr. 262-64, 268-69, 306, 308, 333-35, 341-42).

The extract sample remained on the bench desk, unrefrigerated, between January 14 and February 3. On February 3 and February 4, 1987, the PCB analyses, reported in the NEIC certificate of analysis, were performed. NEIC used one gram of each sample in its analyses. The analyses used a gas chromatograph with an electron capture detector (GC/ECD). Paragraph 2.1 of

Exhibit R40 provides that ten (10) grams are to be extracted serially three times. However, this was modified and only one gram was used, as this does not affect the testing method and the use of 10 grams is so high that it may damage the equipment. No confirmation methods were employed by NEIC because the data was retrieved and found reliable and there were no interferences. Nor did the soil blank contain any significant interferences. The certificate of analysis submitted by NEIC on February 10, 1987 states that the two samples contained detectable levels of PCB in concentrations of 350 (pile sample) and 130 ppm (yard sample). (Exs. C18, C19, C25, R36-38; Tr. 237-38, 272-73, 281-82, 318-19, 345-46).

Complainant sent the samples to respondent so that they could perform their own PCB analyses, who then forwarded the two "soil" samples to Sherry Laboratories (Sherry), Muncie, Indiana, which received them on October 16, 1987. Stanley West (West), chief chemist of the environmental section at Sherry, performed the PCB analyses and prepared the laboratory report dated October 28, 1987. These tests showed similar results. West did not perform the chemical analysis which determined the samples were not soil. (Ex. R7; Tr. 611-13, 627, 342-43). EPA sample number 121886JMJO1 was designated by Sherry as sample "A," which was collected from underneath the

tarp covering the nonferrous pile sampled by Leon. (Tr. 614). NEIC's analysis of this sample resulted in an average PCB concentration of 350 ppm, and Sherry reported a PCB level of 168 ppm. (Tr. 613-14). EPA sample number 121886JMJ03 was designated by Sherry as sample "B," which was collected from midlot on respondent's facility. The NEIC's and Sherry's chemical analysis results for PCB concentrations were 130 ppm and 122 ppm, respectively. (Exs. C17, 18, R7; Tr. 613-14). Sherry's laboratory report of October 28, 1987 did not mention that the PCB method of analysis was GC/ECD as specified in Test Methods for Evaluating Solid Waste (TMESW), July 1982, SW-846. It did not confirm these results by gas chromatography/mass spectrometry (GC/MS) or any other method because it did not have enough sample to perform the analysis. (Ex. R4; Tr. 615, 627, 630).

Method 8080, as set forth in TMESW, provides that composite samples should be collected in refrigerated glass containers in accordance with the requirements of the program, the samples must be iced or refrigerated from the time of collection until extraction, and all samples must be extracted within seven days and completely analyzed within thirty days of collection. Method 8250 found in GS/MS method for Semivolatile Organics; Packed Column Technique (PCT) and Method 8270 GC/MS Method for Semivolatile Organics; Capillary Column Technique (CCT), SW-846 (July 1982), also impose temperature and time requirements.

(Ex. R34 at 9, R35 at 5; Tr. 607). A revision to TMESW was issued by EPA in September 1986 of which official notice is taken. The preface to the manual states that it "is intended to provide a unified, up-to-date source of information on sampling and analysis related to compliance with RCRA regulations." Once the sample has been collected it must be stored and preserved to maintain the chemical and physical properties that it possessed at the time of collection. Table 4-1, Volume 1B, at 4-5, provides, in pertinent part, the following recommended sample containers, preservation techniques, and holding times for samples of soil/sediments and sludges:

Volatile Organics	4-oz. (120-ml) widemouth glass with Teflon liner	Cool, 4°C	14 days
Semivolatile Organics	8-oz. widemouth glass with Tef- lon liner	Cool, 4°C	14 days

For Method 8080, the revised manual in Section 6.0, at 8080-6, states that extracts must be stored under refrigeration and analyzed within 40 days of extraction.

On December 29, 1986, DEM approved a sampling plan for the facility following nearly two months of correspondence and revisions to the original plan, which was first submitted on November 5, 1986 for DEM review. The agreed-to sampling plan

embodied an approach designed to sample a location chosen to represent a "worst case scenario," an area through which the most potentially contaminated precipitation flowed. (Exs. R19, R21; Tr. 405, 664-65). On January 16, 1987, Cahill implemented the sampling plan. (Ex. R8; Jt. Ex. 1, ¶ 6; Tr. 407, 666). This study consisted of digging a pit with a backhoe at a location near the Providence Harbor, where a product pile had been stored for several months and which DEM identified as containing the highest levels of PCBs, as determined by RIAL's test results on samples from the September 18, 1986 DEM investigation. This site was chosen as the most likely to reveal PCBs in the soil and groundwater. (Exs. R8, R41; Tr. 664, 667, 669). Prior to Cahill's excavation of the pit, there was scraped from the surface a layer of "man-made material" which was approximately twelve (12) inches deep. Cahill took three soil samples at 21, 30, and 43 inches below grade, in order to evaluate the PCB content above, in, and below a clay layer identified during excavation. Also taken were two groundwater samples from the groundwater flowing into the pit, and three surface water samples from puddles located in the vicinity of the study area. DEM officials were present for part of the Cahill study, but left before it was complete. They also collected samples during this investigation. (Ex. R8; Tr. 106, 669-72, 676-77).

In that DEM had previously sent its samples to RIAL for PCB analysis on January 16, 1987, Cahill also sent its soil and water samples to RIAL to avoid any questions that might arise due to difference in laboratory procedures. DEM also sent its Cahill study samples to RIAL, but the laboratory apparently lost them. (Tr. 107, 678-79). In accordance with Cahill's instructions, RIAL split the water samples and had half of each sample filtered through a 0.45 micron filter. Both filtered and unfiltered portions were then analyzed using the same extraction process. The certificate of analysis for the 10 split water samples was reported on February 13, 1987. The test results on the unfiltered samples show only trace amounts of PCB concentrations as measured in part per billion, and on the filtered samples each result was less than 1.0 ppm. RIAL was directed to split the three soil samples and test one portion of each using the methylene chloride extraction and EP toxicity test in accordance with the guidelines in SW-846, (July 1982). The other portion of each soil sample was only purged and rinsed with de-ionized water. The test results reported on February 24, 1987 show that no PCBs were detected in any of the three soil samples. (Ex. R8; Tr. 679-83).

In May 1987, respondent prepared composite samples from approximately 70 individual samples taken from a pile of Texas Instruments (TI) product that DEM had sampled during its

September 18, 1986 investigation. Respondent chose the TI pile because the DEM samples from that pile indicated a higher level of PCBs than most of the other DEM investigation samples. The TI pile was sampled along a grid pattern, using an auger. The individual samples were added together and weighed. The resulting composite was then hand-sorted to remove large pieces of steel that could not be granulated, thereby removing approximately four percent of the sample. The composite was then granulated six times so that no particle was more than one-eighth of an inch along its longest axis. Approximately 90% of the composite was recovered after granulation. The composite was then coned and quartered to homogenize it further, and a subsample was taken for final lab preparation. This subsample was coned and quartered again, and put through a mesh screen, producing several approximately equal fractions that were analyzed for their PCB content by Sherry. Sherry analyzed these samples using both GC/ECD and GS/MS methods. The laboratory report was dated July 9, 1987, approximately six weeks following receipt of the samples on May 27, 1987. No PCBs were detected although analysis of GC/ECD revealed several peaks in the expected retention time for PCB isomers. Analysis under the same gas chromatography conditions and column was then performed by GC/MS to identify these peaks, which failed to make such identification for PCBs. (Jt. Ex. 1, Ex. R1, R5, R9 at 64-sample BM#5; Tr. 408, 412-20, 616).

On December 31, 1987, Carroll took ten grab samples of respondent's product, eight from piles at the Allens Avenue site, and two samples from material at the Mapleville site. These samples were received by Sherry on January 5, 1988.^{5/} Nine of the samples were analyzed using GC/ECD procedures, and one was analyzed using GC/MS procedures. Only one sample showed PCBs in concentrations higher than 50 ppm. Sample #8, which was taken from the non-ferrous pile previously sampled in April 1986, September 1986, and December 1986, showed a PCB concentration of 77 ppm. Sample #2 had a PCB concentration of 42 ppm, and four samples had PCB concentrations of less than one (1) ppm. Samples #1 to 9 were not confirmed by GC/MS, and no method of analysis was specified on the laboratory report. (Ex. R13; Tr. 421-24, 618, 619, 631).

DISCUSSION AND CONCLUSIONS OF LAW

I. The Fourth Amendment Issue

Respondent contends initially that much of the evidence relied on by complainant is legally defective and must be stricken from the administrative record on Fourth Amendment

^{5/}Jt. Ex. 1, ¶ 8 states incorrectly that all ten grab samples were of product from the Allens Avenue facility. Also, Sherry's laboratory report issued on February 16, 1988 incorrectly states the date of receipt as "1/5/87."

grounds. It is argued that the investigation conducted on April 25, 1986 by Leo was actually an administrative search and seizure conducted without notice and consent, or a warrant, in violation of its constitutional rights. Respondent maintains variously that Leo's investigation was a search because: (1) It possesses an allegedly legitimate objective privacy interest in the product stored within the fence-enclosed facility; (2) Leo collected the sample on the rip-rap which is owned purportedly by respondent and that he knew the sampled material was the latter's personal property; (3) Leo interfered with respondent's personal property in open fields; and (4) The analysis of the sample itself constituted a search. Respondent claims that even if no search took place there was an unconstitutional seizure of its property when Leo removed allegedly "valuable precious metal bearing product" from the facility. (Resp. Op. Br. at 47-50). Complainant contends that its evidence was not the product of an unconstitutional search because Leo's sampling was not a search and respondent had no constitutionally protected interest "in the scrap outside its fence." Complainant argues that it is unreasonable for respondent to expect that materials it allowed to fall outside the fence would be protected from public view. (Comp. R. Br. at 6).

Before determining whether Leo's actions on April 25, 1986 constituted a search and seizure, necessitating a warrant based upon the facts and circumstances of this case, a few preliminary observations regarding the protections afforded by the Fourth Amendment are apposite.

The Supreme Court has long recognized that the Fourth Amendment's prohibition on unreasonable searches and seizures is applicable to commercial premises and business establishments. New York v. Joseph Burger, 107 S.Ct. 2636 (1987); Marshall v. Barlow's, Inc., 436 U.S. 307 (1978); See v. City of Seattle, 387 U.S. 541 (1967). An administrative entry, without consent, upon the portions of commercial premises not open to the public, is subject to the warrant procedure, and the invasion of a constitutionally protected area by governmental authorities is presumptively unreasonable in the absence of a search warrant. Katz v. United States, 389 U.S. 347 (1967); Air Pollution Variance Board v. Western Alfalfa Corp., 416 U.S. 861 (1974).

As noted in Katz, 389 U.S. at 351, the Fourth Amendment protects people and not places. Further,

What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection. (citation omitted) But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected. (citations omitted)

The central inquiry is when does a person^{6/} have a constitutionally protected reasonable expectation of privacy. The Fourth Amendment does not protect the merely subjective expectation of privacy, but only those expectations that society is prepared to recognize as reasonable. Katz, 389 U.S. at 360-61.

The businessman, like the occupant of a residence, has a constitutional right to go about his business free from unreasonable official entries upon his private commercial property; City of Seattle, 387 U.S. at 543. However, "the expectation of privacy that the owner of commercial property enjoys in such property differs significantly from the sanctity accorded an individual's home The interest of the owner of commercial property is not one in being free from any inspections Donovan v. Dewey, 452 U.S. 594, 598-99 (1981). The expectation of privacy in commercial property is different from and less than a similar expectation in an individual's home. Burger, 107 S.Ct. at 2642.

To be entitled to Fourth Amendment protection, it is first necessary to determine whether there was in fact a "search." Katz established a two-prong test regarding the "person's" reasonable expectation of privacy. United States v. Jacobsen, 466 U.S. 109, 113 (1984), requires that the actions also be examined:

^{6/}Respondent is a "person" as defined in 40 C.F.R. § 761.3.

A "search" occurs when an expectation of privacy that society is prepared to consider reasonable is infringed. A "seizure" of property occurs when there is some meaningful interference with an individual's possessory interest in that property.

The general Fourth Amendment principles must now be applied to the facts of this case. Establishing an actual expectation of privacy requires two elements: (1) what a person had an expectation of privacy in, and (2) what the person wanted to protect his privacy from. A test of whether a person has a privacy interest in a certain place is whether there are any "objective manifestations of any claimed privacy expectations." Dow Chemical Company v. United States, 749 F.2d 307, 312 (6th Cir. 1984), aff'd., 106 S.Ct. 1819 (1986). In that case, the company, a chemical manufacturer, maintained elaborate security around the perimeter of a 2,000 acre facility barring ground-level public views of these areas. Here, respondent clearly had an actual expectation of privacy in the portion of its facility which was surrounded by the chain-link fence and locked gate. Therefore, it was a privacy expectation to be free from ground level intrusions into the enclosed area of the

facility, but not necessarily from mere observation.^{7/} Respondent has a reasonable, legitimate, and objective expectation of privacy within the interior of its covered buildings and the piles of material adjacent to such structures. However, the inquiry focuses on whether respondent possessed a reasonable expectation of privacy in the portion of land between the fence and Providence Harbor, such as the rip-rap, as well as certain material spilling beyond the fence onto same.

First, it is concluded that respondent lacked a reasonable expectation of privacy in the area known as the rip-rap. In contending that the rip-rap on which Leo stood on April 25, 1986 is its property, respondent overlooks "the well-established principle that in this jurisdiction [Rhode Island] the line of demarcation that separates the property interests of the waterfront owners from the remaining populace of this state is the mean-high-tide line." Northeastern Corporation v. Zoning Board of Review of The Town of New Shoreham, 534 A.2d 603, 606 (R.I. 1987). The Supreme Court of Rhode Island concluded in State v. Ibbinson III, 448 A.2d 728 (R.I. 1987), that the mean-high-tide line is the landward boundary of the shore for purposes of the privileges guaranteed by Rhode Island's

^{7/}Since the instant case does not involve an actual physical entry onto the business premises, issues raised in United States v. Swart, 679 F.2d 698 (7th Cir. 1982) are not reached here.

Constitution.^{8/} Leo's privileges of passage along the rip-rap as a member of the public is guaranteed by the Rhode Island Constitution.

A second reason for this conclusion is the application of the "open fields" doctrine to the instant case. Hester v. United States, 265 U.S. 57 (1924); Allinder v. State of Ohio, 808 F.2d 1180, 1184-85 (6th Cir. 1987), appeal dismissed, ___ U.S. ___, 107 S.Ct. 2455 (1987); Oliver v. United States, 466 U.S. 170 (1984). Although respondent possessed a legitimate and reasonable privacy interest in the product stored within the fenced portion of its Allens Avenue facility, this privacy interest does not extend to the rip-rap as well. In a situation analogous to that in Air Pollution Variance Board of Colorado, supra, Leo may have entered respondent's property but not a portion of the premises from which the public was excluded. With regard to the product that had spilled through the fence onto the rip-rap, Leo had, in a sense, sighted what any one who was near the facility could see on the ground. "What is observable by the public is observable, without a warrant, by the Government inspector as well." Barlow's Inc., 436 U.S. at 315.

^{8/}Under Art. I, section 17 of the Rhode Island Constitution, as amended, people of the state "shall continue to enjoy and freely exercise all . . . the privileges of the shore, to which they have been heretofore entitled under the charter and usages of this state." In Jackvony v. Powel, 21 A.2d 554, 558 (R.I. 1941), the State's supreme court determined that one "privilege of the shore" is a public right of passage along the shore, at least for certain proper purposes.

Third, the application of the open fields doctrine raises the question of whether the rip-rap may be considered to be an open field. The term "open fields" may include any unoccupied or undeveloped area outside of the curtilage. An open field need be neither "open" nor a "field" as those terms are used in common speech. Curtilage is the area immediately surrounding a private house and "the area to which extends the intimate activity associated with the 'sanctity of a man's home and the privacies of life.'" Oliver, 466 U.S. at 180, and n. 11. The rip-rap does not come within the definition of curtilage. The intimate activities associated with family privacy and the home were held not to reach the outdoor areas or spaces between structures and buildings of a manufacturing plant. Dow Chemical Co., 106 S.Ct. at 1823.

A shared but private unobstructed road, akin to an open field, was found not to be within the curtilage of a private residence and the person's asserted expectation of privacy in the road was determined to be unreasonable by society's standards. United States v. Roberts, 747 F.2d 537 (9th Cir. 1984). In contrast, the rip-rap here is adjacent to a commercial site, no fences or signs prohibiting access or warning of a trespassing violation have been posted, and over which the public enjoys certain privileges of passage. The court in Oliver also

noted that the government's intrusion upon an open field is not a "search" in the constitutional sense because the intrusion is a trespass at common law, and the existence of a property right is but one element in determining whether expectations of privacy are legitimate. Oliver, 466 U.S. at 183. See also United States v. Karo, 468 U.S. 705, 712-13 (1984).

Respondent argues that Leo's sampling constituted interference with personal property tantamount to a search for Fourth Amendment purposes. However, it is concluded that respondent lacked a reasonable expectation of privacy in such product. Unlike in Allinder, the government did not engage in the physical intrusion, manipulation, and dismantling of respondent's personal property. Leo simply collected enough product to fill a pint-sized sample jar from a pile weighing at least several tons.

The analysis of the sample collected by Leo also does not constitute a "search." To be distinguished are the individuals in Jacobsen, and United States v. Mulder, 808 F.2d 1346 (9th Cir. 1987). Here respondent, a corporation, lacks the requisite expectation of privacy in the tested material which society recognizes as reasonable.^{9/} "The concept of an interest in privacy that society is prepared to recognize as reasonable is,

^{9/}Both of these criminal cases involved the question whether the chemical testing of drugs exceeded the scope of a private search limited to visual perception.

by its very nature, critically different from the mere expectation, however well-justified, that certain facts will not come to the attention of the authorities." Jacobsen, 466 U.S. at 122. Further, RIAL's analysis of the sample merely disclosed whether PCBs and selenium were present in the product, and no other "arguably 'private' facts." RIAL's analysis did not involve a series of tests designed to reveal the molecular structure of the product nor indicate precisely what it was. The composition of the product, including any other unlawful component of the product, was not disclosed by the testing. Thus, the testing of the sample did not compromise a legitimate privacy interest of respondent.

Leo's removal of the sample did not constitute an unlawful seizure of property. While Leo's assertion of dominion and control over the sample constituted technically a "seizure," that seizure was not unreasonable. Respondent's privacy interest in this portion of the product pile had already been compromised by virtue of the product's exposure to the public in an area beyond the fence. Under these circumstances, the publicly-exposed portion of the product could no longer support a reasonable expectation of privacy. Thus, the initial seizure of the product was reasonable.

Respondent's possessory interests in the sample were also protected by the Fourth Amendment, especially since the testing destroyed a small quantity of the product and converted what had been only a temporary deprivation of possessory interests into a permanent one. To assess the reasonableness of this conduct, the nature and quality of the governmental intrusion must be balanced against the importance of the governmental interests alleged to justify the intrusion. It is concluded that the seizure by Leo was reasonable because the "seizure" had, at most, only a de minimis impact on any protected property interest. Since it has been concluded that an unreasonable search and seizure did not occur on April 25, 1986, respondent's other Fourth Amendment arguments need not be reached and decided here.

Also sought is the exclusion of evidence collected by DEM by contending that it was beyond DEM's authority to regulate a precious metal recovery facilities such as respondent. Precious metal bearing wastes are specifically excluded from DEM's regulatory definition of hazardous waste under Section 3.19 of the Rhode Island Rules and Regulations for Hazardous Waste Generation, Transportation, Storage and Disposal, as amended. "[H]azardous waste" is defined under the regulations (Exhibit R31 at 4), in pertinent part as:

[a]any waste, not including precious metal bearing wastes, or combination of wastes . . . which because of its quantity, concentration, or physical, chemical or infectious characteristics may:

A. cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

B. pose a substantial present or potential hazard to human health or the environment.

Such waste include, but are not limited to, those which are toxic, . . .

However, pursuant to Section 5.11 Inspections; Right of Entry, DEM may enter "any place the Director has reason to believe hazardous wastes are generated, stored, treated or disposed of." It has been found that DEM inspected the facility on September 18, 1986, because it suspected violations of the hazardous waste regulations had occurred there, and these alleged violations involved particularly PCBs. The above cited definition of "hazardous waste" does not preclude an inspection, however. It is concluded DEM was authorized to inspect respondent's facility pursuant to the Rhode Island hazardous waste regulations.

II. Reliability of EPA's Analytical Test Results

Complainant contends that PCBs have been disposed of at concentrations of 50 ppm or greater if it is determined by scientifically accurate testing that unauthorized and uncontained PCBs are present at concentrations of 50 ppm or greater on a site. Complainant further argues that: (1) pursuant to 40 C.F.R. Part 761, it may use any scientifically accurate testing methods to determine the presence and concentration of PCBs in a sample, including the GC/ECD method; (2) that it established that there was a proper chain of custody and proper treatment to ensure scientifically accurate test results for every sample relied upon in this matter tested for the presence of PCBs at the Allens Avenue facility; and that (3) any irregularities in the samples' chain of custody or treatment were de minimis and did not materially affect the reliability and validity of the test results.

Complainant maintains that the GC/ECD is an appropriate analytical technique based on the following evidence: (1) GC/MS does not always identify more reliably materials from samples matrices; (2) one of respondent's contractors used GC/ECD to analyze samples, who in turn represented the results to be scientifically accurate (and such results were introduced into

evidence); and (3) another respondent contractor's testing of samples by GC/MS yielded similar results to those obtained by complainant using GC/ECD. Complainant also denied respondent's contention that the carrier solvent was volatilized because the vial was tightly lidded and the extract is relatively stable over a long period of time.

Respondent attacks the scientific reliability of all of complainant's test results. It decries the lack of evidence presented by complainant regarding NETL's and RIAL's testing of the samples, other than the proffered certificates of analysis. Respondent also questions the validity of NEIC's test results in light of the samples' handling, storage, extraction, preparation, and method of analysis.

In particular, respondent denies that complainant's test results on the September 18, 1986 samples were corroborated by a contractor of the former. According to respondent, the samples' "wide variation in PCB concentrations" precluded all witnesses from testifying that RIAL's test results were reliable.^{10/}

^{10/} Respondent apparently refers to its own witnesses on this point.

Respondent also argues that NEIC used inappropriate, if not improper, PCB analytical methods, stressing that the NEIC used a method designed for transformer fluids and waste oils, modified by an extraction procedure designed for pesticide analyses, although complainant has several protocols for analyzing solid samples for PCB concentrations. Respondent notes that NETL, RIAL, and NEIC all failed to perform any confirmatory analyses to check the indicated positive results, and points out that its own GC/MS testing revealed interferences capable of causing the positive results in the PCB analyses relied upon by complainant.

Despite the assertions of both parties that PCB concentration must be determined by scientifically accurate and reliable testing, only respondent attempts to provide statutory language to support this approach. According to respondent, the introductory language in 40 C.F.R. § 761.20, concerning "Prohibitions," states, in pertinent part:

In addition, the Administrator hereby finds, for purposes of section 6(e)(2)(C) of TSCA, that any exposure of human beings or the environment to PCBs, as measured or detected by any scientific acceptable analytical method, may be significant, depending on such factors as the quantity of PCBs involved in the exposure, the likelihood of exposure to humans and the environment, and the effect of exposure.

Complainant notes merely that the Part 761 regulations require no specific procedures to prove the presence of PCBs which have been disposed by spills or other uncontrolled discharges. Optional testing procedures for owners and users of mineral oil dielectric fluid electrical equipment in determining the concentrations of PCBs in such fluid are set out in 40 C.F.R. § 761.60(g). The testing procedures outlined in this section of the regulations are relevant to, but not completely controlling, with regard to the testing requirements for purposes of 40 C.F.R. § 761.60(d).

To support its objection to complainant's contention that it has presented reliable and accurate analytical results respondent focuses on EPA's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) and the NEIC's modified methods used to analyze the samples. The methodologies used by NETL and RIAL to analyze the samples taken during the April 25, 1986 and September 18, 1986 inspections were based on SW-846, though Exhibit C1 does not explicitly state that SW-846 is the source of its testing methodology.

In contrast to respondent's exhibits in the record derived from SW-846,^{11/} complainant presented no evidence concerning whether EPA's Office of Toxic Substances (OTS) has issued

^{11/}Exhibits R4, R22, R23, R34 and R35.

similarly a manual incorporating all sampling and testing methodology approved by such office for use in implementing the PCB regulatory program. For this reason, respondent urges that the methodology for collecting and testing representative samples of waste and other materials, including that for PCBs, as dictated by SW-846, should be applied to the testing (and sampling) at issue in this case.

As stated in SW-846's abstract (Exhibit R4), the manual "provides test procedures which may be used to evaluate those properties of a solid waste which determine whether the waste is a hazardous waste within the definition of Section 3001 of the Resource Conservation and Recovery Act" Such properties or characteristics include the waste's reactivity, corrosivity, ignitability, and composition of the waste. According to SW-846, Method 8080 is used to determine the concentration of certain organochlorine pesticides and PCBs in groundwater, liquid, and solid sample matrices. Method 8080 may be used to detect PCB Aroclors 1242 and 1254. Solid samples are to be extracted with hexane:acetone (1:1) using either the Soxhlet extraction (Method 3540), or sonication (Method 3550) procedures. (Exhibit R4 at 031).

In October 1982, a study was issued by OTS on various analytical methods for by-product PCBs in commercial products

and product wastes, air, and industrial wastewater.^{12/} The study points out that determining concentrations of PCBs synthesized as by-products in commercial products or product waste presents three special problems:

(a) the analyte does not generally resemble a commercial PCB mixture, so quantitation against Aroclor standards would be incorrect; (b) the matrix often contains high concentrations of other chlorinated organics which are not easily separated during a cleanup procedure and which interfere with the qualitative and quantitative analysis; and (c) the matrix is undefined and can include gases, liquids, or solids of any purity and complexity. (Exhibit R25 at 395).

The study concludes that the complexity of the matrix and high probability of chlorinated organic interferents precluded the use of GS/ECD; and that the best available technique is GC/EIMS. (at 397).

An interim report entitled Verification of PCB Spill Cleanup by Sampling and Analysis (Report), was issued by OTS in 1985 and outlines specific sampling and analysis methods to determine compliance with EPA policy on the cleanup of PCB spills. (Exhibit R10). It states that the sampling design

^{12/}Exhibit R25. This exhibit consists of only eight pages. It begins with a cover page and ends on page 397. However, the exhibit refers to section 4, Method Validation, in its entirety.

focuses upon the control of the false positive rate, the probability of concluding that PCBs are present above the allowable limit when actually they are not. Sampling and analysis techniques are described for PCB-contaminated solids, including but not limited to those of soil and sediment. After noting that appropriate enforcement methods were selected based on reliability, the report continues:

Since GC/ECD is highly reliable, widely used, and is included in many standard methods, it is a primary recommended method for most samples. Secondary methods may be useful for confirmatory analyses or for special situations when the primary method is not applicable. (at 073).

The Report discusses a number of analytical techniques used for the analysis of PCBs in samples associated with PCB spills. Gas chromatography is discussed first, and GC is "frequently the method of choice." Further, GC/ECD is "generally the method of choice for analysis of spill site samples" due to its sensitivity, high selectivity against hydrocarbon background, and cost of operation. Further, GC/ECD is "most appropriate when the PCB residue resembles an Aroclor . . . standard and other halogenated compounds do not interfere." Highly specific identification of PCBs is performed by GC/MS, and according to the Report, this method is particularly able to detect the PCBs

because of its intense molecular ion and the characteristic chlorine cluster. However, because of its expense, complexity of data, and lack of sensitivity, GC/MS has not been used as extensively as other GC methods, particularly GC/ECD. In its summary of recommended analytical methods, the report states that in analyzing solids (including soil) Method 8080 from SW-846 is the primary recommended method and Methods 8250 and 8270 are secondary procedures. Secondary methods may be useful for confirmatory analyses, or where the situation (e.g., high level of interferences) indicates that the primary method is not applicable. (Exhibit R10 at 113, 118-19, 122-23).

The findings show that complainant failed to abide strictly by certain sample preservation and handling guidelines specified in SW-846. These were lapses such as the neglect to refrigerate the samples, the failure to extract the samples within seven days, and to be analyzed completely within 30 days of collection. However, a blemish here or an imperfection there is not fatal. Complainant's omission to follow perfectly standard quality control/quality assurance procedures, particularly with regard to the NEIC samples, does not invalidate the complainant's testing under the facts presented.

The extraction procedure and analytical method employed by complainant are appropriate and scientifically accurate. EPA's regulations state that "any scientifically acceptable analytical method" may be used to measure or detect PCBs for purposes of TSCA § 6(e)(2)(C). The PCB Disposal Requirements under 40 C.F.R. § 761.60 do not list a specific method for testing samples for PCBs. The record reveals that there are several PCB testing methods and procedures promulgated under other statutes or for different purposes (e.g., verification of PCB spill cleanup), but it does not rebut complainant's assertion that its PCB testing was appropriate and valid. NEIC has developed a method for analyzing soil samples for PCBs based upon its years of experience, number of tests conducted, and quality control table. The scientific acceptability of NEIC's testing method is not destroyed or eroded merely because other testing methods/analytical techniques are available and are deemed "the best available technique" in certain literature.

Respondent contends the EPA's test results in all three instances are unreliable because the laboratories did not perform any confirmatory analyses after initial GC/ECD analysis of the samples and respondent's own testing revealed the presence of PCB interfering compounds. NEIC's results were reliable and NEIC did not confirm its test results because the data showed no interference to be present. Further, respondent's

testing yielded similar results. If failure to confirm the results is fatal to the analysis of each sample, certain exhibits of respondent should also be condemned as unreliable. The propriety of using GC/ECD is shown by the fact that Sherry itself uses GC/ECD as its primary analytical technique. It is concluded that complainant has established by a preponderance of the evidence that its analytical results are reliable.

III. Representativeness of Complainant's Samples

Respondent's third defense concerns the alleged lack of representativeness of complainant's samples. Complainant, however, maintains that it is not necessary that its samples be "statistically representative" of the facility as a whole. (Comp. Op. Br. at 14). It argues that, based on the regulations, it must prove that there exists at the Allens Avenue facility PCB concentrations of 50 ppm or greater. Once such PCB concentrations are established complainant urges that representative sampling is superfluous, if not irrelevant, because the vast number of piles would only dilute the PCB concentrations already determined. Complainant concedes that its samples were not representative of the entire piles at the facility. It contends, however, that it would be impossible to enforce the storage and disposal requirements if respondent's liability was predicated upon an entire pile or the facility as a whole containing 50 ppm or PCBs or more. (Comp. Rep. Br. at 5).

Respondent's position is that the test results are inadequate to characterize the piles, or even the samples, as containing PCBs above the regulatory limit because the samples tested were not representative of them. (Resp. Op. Br. at 35). In support, it refers to complainant's documents which state specifically the importance of obtaining representative samples. (Exs. R10 at 79, R 23 at 302, R24 at 340, 387); that the evidence shows the shredded product within a pile is not of uniform composition, but heterogeneous; that a deliberate bias was introduced into the samples by Leo's alleged authoritative sampling; that respondent's own composite sampling allegedly showed no detectable amounts of PCBs; and finally, respondent questions the validity of complainant's evidence regarding PCB concentrations in light of complainant's alleged failure to identify the source of the PCBs at the facility.

It is clear that the PCB disposal regulations contemplate the taking of representative samples for testing purposes in certain situations. 40 C.F.R. § 761.60(g). EPA documents and the OTS TSCA Inspection Manual emphasize that proper sampling procedures demand selection of a site or a number of samples that will produce a representative sample. TSCA Inspection Manual, Volume I: TSCA Base Manual (January 1980), at 3-38; Exhibit R11 at 153.

Respondent argues stoutly that the test results are inadequate to characterize the piles because the samples tested are not representative of them and, are therefore, of insufficient probative value. In support, it cites complainant's documents that provide guidance on taking representative samples, urging essentially that the procedure encouraged in these documents are mandatory and the inspector's failure to follow them ineluctably leads to the conclusion that the samples were not representative. These arguments have been previously addressed in the case In re: Electric Service Company, TSCA Appeal No. 82-2, Final Decision (January 7, 1985). It is dispositive of the issues raised here.

The failure to follow sample collection procedures recommended if not required by complainant's documents does not necessarily render the samples non-representative. As elaborated upon in Electric Service, in pertinent part:

First, it is clearly stated in the manuals that they provide general guidance; therefore, it is within an inspector's discretion, based on experience and the specific circumstances of the inspection site, to deviate from these procedures.

* * *

Second, although an Agency's properly promulgated rules and regulations are generally binding on it as well as on the public, it has been held in a variety of cases that guidelines, such as the ones in issue, which have not been published in the Federal Register and have not been promulgated, are not "properly promulgated rules." Therefore, they do not have the force and effect of law and are not binding on either the public or the Agency. (at 12-13).

The failure of the inspectors to follow procedures in the TSCA inspection manual and SW-846 does not destroy the representative nature of the samples.

Concerning the probative value of the samples, a representative sample is one which is considered possessing the same qualities of some larger body or mass. A "grab" sample, taken without following any specific procedures to ensure its representativeness, provides merely information about itself, but may still have probative value. In the Matter of Robert Ross & Sons, Inc., TSCA Appeal No. 82-4, Final Decision (April 4, 1984), at 9. The testimony establishes and complainant admits the samples taken were non-representative grab samples. However, in the present case, proof of the disposal and storage for disposal violations does not depend on describing accurately the condition or quality of some larger body. As stated in Electric Service Company, supra, at 17-18:

Instead, it hinges on proof of an uncontrolled discharge of PCBs. Under such circumstances, the sample itself is the uncontrolled discharge, the improper disposal, or, so to speak, the corpus delicti. Therefore, the violations may be established by simply proving two things: (1) that the samples themselves contain PCBs in concentrations exceeding 50 ppm; and (2) that the PCBs were not disposed of properly, a conclusion which may be inferred from where the PCBs were found. The grab samples were taken from debris, soil and pools of liquid on Respondent's property and are surely "evidence of uncontrolled discharges [improper disposals] at [Respondent's] facility." So long as the samples contained concentrations of PCBs over the regulatory limit, they are evidence which, if unrebutted, is sufficient to establish improper disposal. (emphasis added)

Thus, it is not always necessary to take a representative sample to prove a violation of these PCB regulations. In the Matter of N.O.C., Inc., t/a Noble Oil Company, TSCA Appeal No. 84-2, Final Decision (February 28, 1985), at 2, n. 5. Further, respondent has not rebutted successfully the evidence presented that the samples contained PCBs in excess of the regulatory limit.

Count I of the complaint concerns illegal disposal. It alleges:

(6) PCBs had been released from at least two of the piles alleged in paragraph 4, above, and into the surrounding soil.

(7) These releases constituted the disposal of PCBs. 40 C.F.R. § 761.60.

(8) These releases violated 40 C.F.R. § 761.60(a)(1).

Complainant contends on brief that respondent spilled or otherwise discharged PCBs at concentrations of 50 ppm or greater into its Allens Avenue facility, thereby "disposing of PCBs" in an unapproved manner. Complainant argues essentially that respondent has shredded discarded PCB-filled electrical equipment, among other types of material, during the course of its normal operations at the Allens Avenue facility, and that the released dielectric fluid containing PCBs then contaminated to some degree everything passing through the shredder. Later, the shredded materials stored in piles on the facility's grounds continued to release the remaining dielectric fluid onto the surface and/or soil of the facility and beyond. It is argued further that it is unnecessary for the ALJ to determine whether the surface of the facility consists of soil, product, or a mixture of the two because the definition of "disposal" simply

refers to completing or terminating the useful life of PCBs and PCB Items. 40 C.F.R. § 761.3. Nonetheless, complainant maintains the surface of the facility consisted of a mixture of metal and soil.

In its reply brief, complainant asserts the PCB regulations do not require proof of soil contamination, even though the complaint states PCBs were released "into the surrounding soil," and it denies that it ever changed its theory of recovery in this case which foreclosed respondent of fair notice concerning the disposal claim. Complainant is of a mind that the issue germane to Count I is whether or not respondent has unlawfully disposed of PCBs in an uncontrolled discharge, and that it had sufficient notice of this claim in order to mount a proper defense. (Comp. Rep. Br. at 2-4).

Respondent's position is that Count I must be dismissed because complainant has failed to establish by a preponderance of the evidence that the soil at the facility is contaminated with PCBs; that neither DEM nor EPA took any soil samples from the site; and that the only soil samples tested failed to detect any PCBs. The latter refers to samples taken during the Cahill study. (Resp. Op. Br. at 37-40). Respondent contends further that complainant presented no evidence supporting a charge that it spilled or discharged PCBs, or that the alleged spill/discharge occurred prior to the materials' arrival at the

Allens Avenue facility. Moreover, respondent believes it has been prejudicially denied due process if complainant is allowed to proceed on a disposal theory other than a release of PCBs into the soil.

The PCB regulations specify procedures for PCB disposal to ensure that additional amounts of PCBs are not added to the environment. 40 C.F.R. § 761.60. In general, the regulations require that all PCBs in concentration over 50 ppm be disposed of in an approved manner, such as incineration. The regulations, 40 C.F.R. § 761.3, define "disposal," in pertinent part, as follows:

"Disposal" means intentionally or accidentally to discard, throw away, or otherwise complete or terminate the useful life of PCBs and PCB Items. Disposal includes spills, leaks, and other uncontrolled discharges of PCBs. . .

In significant part, 40 C.F.R. § 761.60(d) provides that:

(1) Spills and other uncontrolled discharges of PCBs at concentrations of 50 ppm or greater constitute the disposal of PCBs.

Complainant has established by a preponderance of the evidence that PCBs are present in certain piles and on the surface of the facility at concentrations of 50 ppm or greater.

In contrast to the situation posed by PCBs leaking from a known container or article, PCBs have been detected in large piles containing many tons of material and on the surface of a six-acre facility. Complainant has shown how the material arrives at the facility, is processed, stored, and finally exported to a customer. In the brief period of time since the inspection program began, in early 1987, respondent had already accumulated at least three capacitors suspected of containing PCBs. The PCB regulations do not require the source of the PCBs to be specifically identified, but instead apply to PCBs only if PCBs are present in concentrations above a specified level. 40 C.F.R. § 761.1(b). Here, the preponderance of the evidence establishes that PCBs are present above permitted levels in certain areas of the Allens Avenue facility although their particular source(s) remains a matter of conjecture. Complainant's inability to identify such source(s) is of no legal moment. The concatenation of the evidence shows that there has been an uncontrolled discharge of PCBs constituting a disposal of PCBs at the facility, regardless of whether it is characterized as a spill or release. It is concluded that respondent disposed of PCBs in violation of § 761.60(a).

Respondent has erroneously premised the bulk of its defense to Count I primarily on disproving that PCBs have been released into the surrounding soil. Respondent argues that it will be unfairly prejudiced if complainant is allowed to pursue a

"spill" theory rather than a release of PCBs into the soil. While these arguments possess superficial merit, one must resist being waylaid by them. First, Part 761 defines the term "disposal" to include spills and other uncontrolled discharges of PCBs. Resort to Webster's II New Riverside University Dictionary (1984) defines "release" as follows:

1. To set free from confinement, restraint, or bondage: LIBERATE.
2. To unfasten, free or let go of . . .

"Spill" is defined, in pertinent part:

1. To cause or allow (a substance) to run or fall out of a container.

"Discharge" is defined, in significant part:

3. To release.

It is clear that these three terms share similar ordinary meanings as used in the English language, and respondent was fully aware that it had been charged with the improper disposal of PCBs.

Second, "[t]he purpose of the administrative complaint is to give the responding party notice of the charges against him The . . . notice is adequate in the absence of a showing that a party was misled."^{13/} The gravamen of the

^{13/}Davis, Administrative Law Treatise, § 14.11 at 47 (2d edition).

violation in Count I is that respondent disposed of PCBs in concentration in excess of 50 ppm in an unapproved manner. Respondent notes that complainant's burden is to prove the violations "as alleged in the complaint," and it would have presented other evidence to rebut a "spill theory." (Resp. Op. Br. at 57, n. 48; Rep. Br. at 26). Regardless of the terms used in Count 1, it is doubtful that any additional evidence presented by respondent would be of such a substantially different nature considering that we are still dealing with an allegation of improper disposal. Respondent would similarly attack the samples' collection, handling, chain of custody, preparation, extraction, and testing analysis, as it did in the instant case. It is concluded that respondent was not deceived by the phrases used in Count I.

Third, the PCB regulations clearly do not require that a charge of improper disposal be accompanied by an allegation of contamination of the surrounding soil. 40 C.F.R. §§ 761.3, 761.60(a)(1), 761.60(d)(1). Complainant is not obligated by 40 C.F.R. § 22.24 to prove that PCBs were released into the surrounding soil. The phrase "and into the surrounding soil" is mere surplusage which is not essential to the statement of the cause of action, namely, PCBs have been improperly disposed of by respondent in violation of 40 C.F.R. § 761.60(a)(1). Complainant is not required to prove this portion of the

allegation which is concluded to be irrelevant, immaterial, and unnecessary.

Count II of the complaint alleges that respondent improperly stored PCBs designated for disposal in violation of 40 C.F.R. § 761.65(b)(1). Respondent is charged with using facilities for storing PCBs which lacked a roof, walls, floor, and continuous curbing.

Complainant has proved by a preponderance of the evidence that the sampled product piles contain PCBs at concentrations of 50 ppm or more, and, thus, is subject to the PCB storage regulations. It is concluded that respondent violated 40 C.F.R. § 761.65(b)(1) because the preponderance of the evidence establishes that it did not store the PCBs in a proper and lawful facility.

Appropriateness of Proposed Penalty

The pertinent provision of TSCA, Section 16(a)(2)(B), 15 U.S.C. § 2615(a)(2)(B) provides:

(B) In determining the amount of a civil penalty, the Administrator shall take into account the nature, circumstances, extent and gravity of the violation or violations and, with respect to the violator, the ability to pay, effect on ability to continue to do business, any history of prior such violations, the degree of culpability, and such other matters as justice may require.

These considerations are explained further and amplified upon in EPA's Guidelines for Assessment of Civil Penalties Under Section 16 of TSCA (Guidelines). EPA issued the Guidelines in two parts: a general TSCA Civil Penalty System (CPS) and a PCB Penalty Policy. 45 Fed. Reg. 59770 and 45 Fed. Reg. 59776 (September 10, 1980). The general TSCA CPS sets forth a general penalty assessment policy which is designed to establish standardized definitions and applications of the statutory factors that Section 16(a)(2)(B) of TSCA requires the Administrator to consider in assessing a penalty. It also provides the general framework within which the specific penalty guidelines of the PCB Penalty Policy were developed. Under the CPS penalties are determined in two stages. 45 Fed. Reg. 59777 (September 10, 1980).

First, the "gravity-based penalty" (GBP) is calculated based upon the "nature" of the violation; the "extent" of environmental harm that could result from a given violation; and the "circumstances" of the violation. These factors are incorporated in a matrix from which the amount of GBP is calculated. The vertical portion of the matrix entitled "Circumstances (probability of damages)" consist of three categories: "High range, Mid range and Low range." The horizontal portion of the matrix bears the rubric "Extent of potential damage" and also has three classifications: "A-Major, B-Significant and

C-Minor." Second, after the GBP figure has been determined, it is adjusted upward or downward in consideration of the remaining statutory factors: culpability; history of such violations; ability to pay; ability to continue in business; and such other matters as justice may require.

The regulation's specific penalty assessment guidance contained in the PCB Penalty Policy incorporates the approach used in the general guidelines in the TSCA CPS. In calculating the GBP under the PCB Penalty Policy, the "nature" factor is the same for all violations because all violations of Part 761 are chemical control violations. Thus, to calculate the GBP for PCB violations, one considers the remaining two factors: (1) the "extent" of environmental harm, which is determined by the amount and concentration of the PCB material involved; and (2) the "circumstances" or "probability for damage" which is determined by eight categories of violation by type, e.g., "marking" violations or "use" violations. If the ALJ determines that the violation has occurred, he shall determine the dollar amount of civil penalty to be assessed in accordance with any criteria set forth in TSCA, and he must consider the civil penalty guidelines issue under TSCA. If the ALJ assesses a penalty different from that proposed in the complaint, he shall set forth the specific reasons for any increase or decrease. 40 C.F.R. § 22.27(b).

Concerning Count I, Improper Disposal, the "extent" factor, major, significant or minor is not determined easily. The PCB penalty policy states that extent is determined by "the amount of PCB material involved," and the "most obvious measure of the amount of PCB material involved is weight." Further, "some violations will involve non-liquid PCB material, usually as a result of liquid PCBs being spilled . . . such solids will often weigh considerably more than liquid PCBs. 45 Fed. Reg. 59778, 79 (September 10, 1980). For these reasons, each of the three extent categories are defined by several different units of measurement.

Complainant argues that the extent of the two violations is major as determined by the amount and concentration of the PCB material involved. It also maintains that at least 5,000 kilograms or 1,100 gallons of PCBs are present at the facility based on the amount of PCB present in the samples and the volume of the piles present on the site. The "circumstances" of the disposal and storage violations were determined to be "level one" and "level three," respectively. Complainant also requests an increase in the civil penalty because respondent allegedly has not fully complied with the DEM consent agreement. (Comp. Op. Br. at 22-26).

Respondent contends that complainant has improperly extrapolated from the test results the conclusion that there is massive PCB contamination at the facility. Respondent's view is that both counts should be reclassified as "minor" violations since the samples contained less than 1,000 kgs. of PCBs and less than 150 cubic feet of PCB solids. It argues that the penalty be decreased since respondent lacked knowledge and complete control over the situation and has demonstrated good faith during the proceedings. (Resp. Op. Br. at 58-60).

In support of its penalty calculation, complainant relied principally upon the testimony of Jouzaitis. She placed each violation within the major extent. The premise of her reasoning was that most of all of the samples indicated the presence of PCBs, the cubic foot characterization, density of PCBs and the number of kilograms (5,000) she thought were present. (Tr. 187). The basis for the major classification was the extrapolation from the samples to embrace all the piles at the facility. If she were not able to draw the inference from the samples to the rest of the site or to the other piles, Jouzaitis conceded that the extent of potential damage would be minor rather than major and the penalty reduced from \$15,000 to \$1,500. (Tr. 223, 228).

The ALJ does not find fault with complainant extrapolating from the samples to the size of the piles to arrive at the penalty calculations. The samples are representative of the piles and the size of the piles should be considered in arriving at the penalty. Fully appreciating the difference between a pile of solid material and liquid, the extrapolating done by complainant is analogous to that done with a surface impoundment.

The ALJ has considered the penalty adjustment factors in TSCA and the Guidelines and, with the exception of one factor, he does not believe respondent is entitled to any adjustment. It is, however, entitled to an adjustment in the penalty based upon the "such other matters as justice may require" mentioned in TSCA. The respondent instituted voluntarily a visual inspection program to separate inspected PCB capacitors from the incoming materials. Though it was in the respondent's favor to detect and separate the offending capacitors, such conduct on its own weighs in its favor. It supports a downward adjustment of 20 percent in both counts of the complaint. The proposed penalty of \$25,000 for Count One (Disposal) and that of \$15,000 for Count Two (Storage Disposal) should be reduced accordingly. The penalty in this matter should be as follows: The penalty for Count One should be reduced to \$20,000 and that for Count Two to \$12,000, for a total penalty of \$32,000.

ORDER^{14/}

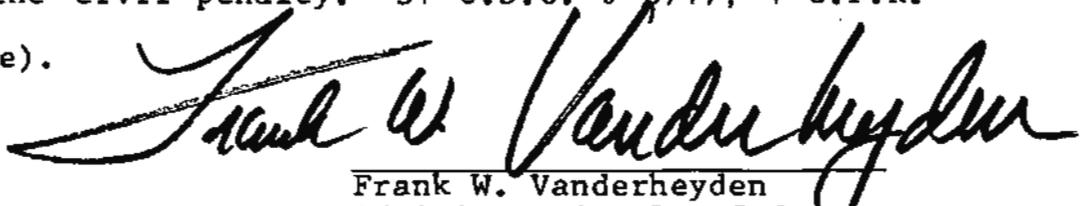
Pursuant to Section 16(a)(2)(B) of the Toxic Substances Control Act, 15 U.S.C. § 2615(a)(2)(B) the following order is entered against Boliden Metech, Inc.:

a. A civil penalty of \$32,000 is assessed against the respondent for violations of the Toxic Substances Control Act.

b. Payment of the civil penalty shall be made by submitting a cashier's or certified check payable to the Treasurer, United States of America, and mailed to:

EPA - Region I
 (Regional Hearing Clerk)
 P.O. Box 36019M
 Pittsburgh, PA 15251

c. Payment shall be made within sixty days (60) days after receipt of the final order. Failure upon part of respondent to pay the penalty within the prescribed statutory time frame after entry of the final order may result in the assessment of interest on the civil penalty. 31 U.S.C. § 3717; 4 C.F.R. §§ 102.13(b)(c)(e).


 Frank W. Vanderheyden
 Administrative Law Judge

Dated: June 30, 1989

^{14/}Unless an appeal is taken pursuant to the Rules of Practice, 40 C.F.R. § 22.30, or the Administrator elects to review this decision on his own motion, the Initial Decision shall become the final order of the Administrator. 40 C.F.R. § 22.27(c).