DRAFT FINAL CLOSURE PLAN AMERICAN NATIONAL CAN COMPANY OAKLAND PLANT 3801 EAST 8TH STREET OAKLAND, CALIFORNIA 94601

EPA IDENT. NO. CAD009162116

Prepared for: American National Can Company Chicago, Illinois

January 1995

DRAFT FINAL CLOSURE PLAN

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EPA IDENTIFICATION NO. CAD 009162116

Prepared by: Cadwalader, Wickersham & Taft, March 1988

Revised by: Rust Environment & Infrastructure, April 1994

Draft final by: Rust Environment & Infrastructure, January 1995

B. Purpose

- 1. This document revises, amends and sets forth a Closure Plan for two Hazardous Waste Storage Areas at the Oakland Plant. As more fully described herein, this Closure Plan describes the action to be taken to secure the Hazardous Waste Storage Areas of the Plant to protect human health and the environment in accordance with the closure requirements of Title 22, Article 23 of the California Administrative Code. Applicable sections of the CAC will be hereinafter referenced by a number within parentheses (e.g., (67212)).
- 2. This is a final closure. The nature of the closure is to change the status of the Oakland Plant from a generator and a storage facility to a generator facility that does not store hazardous waste for more than 90 days. Since the facility has been sold, no hazardous waste will be generated at the facility by American National Can Company.

II. FACILITY CONDITIONS

A. Description of the Facility

The Oakland Plant employed about 300 people in the manufacture of metal cans and can ends. The Plant comprised an irregularly shaped one-story building approximately 536,000 square feet, with a basement under a portion of the building. The building was located on a triangular plot of land (approximately 18.5 acres) in Oakland, California.

1. Type of Industry - Standard Industrial Code

Can Manufacturing - 3411

2. Products

Soldered and Welded Metal Cans and Can Ends

- 3. Facility Location
 - a. Latitude

27 degrees 40 minutes 000 seconds

b. Longitude

122 degrees 15 minutes 000 seconds

c. Geographic Location

I. <u>INTRODUCTION</u>

A. General Information

1. Owner and Operator

- a. American National Can Company, 8770 West Bryn Mawr Avenue, Chicago, Illinois 60631 sold the facility and land to Kmart Corporation, West/Central Regional Office, 700 South Orange, West Covina, California 91790 and High Street Associates, 100 Bush Street, San Francisco, California 94104 in February 1994.
- b. American Can Company was the owner and operator of the facility located at 3801 East 8th Street, Oakland, California ("Oakland Plant" or "Plant"), but sold its packaging division, including the Oakland Plant, in November 1986. The division sold was then incorporated as American Can Packaging Inc., a Delaware corporation. In April 1987, American Can Packaging Inc. merged into National Can Corporation. At that same time, the surviving corporation changed its name to American National Can Company, a Delaware corporation, which continued to own the facility until February 1994.

2. Facility Name

American National Can Company

3. Facility Representative

Judith Peters
Corporate Environmental Engineer

4. Mailing Address

Judith Peters - 04D, American National Can Company, 8770 West Bryn Mawr Avenue, Chicago, Illinois 60631

5. Telephone No.

(312) 399-3162

6. E.P.A. Identification No.

CAD 009162116

3801 East 8th Street, City of Oakland, County of Alameda, State of California

d. Hydrogeological Conditions

Hydrogeological conditions at the site are described in Exhibit I.

e. Weather and Climatic Conditions

The climate in the region can best be described as Mediterranean - the region experiences a rainy season from November through March when precipitation is generated from frontal storms. Average yearly rainfall in the region varies significantly on an east-west basis as a result of orographic effects from the uplands to the east. Average yearly rainfall in the immediate vicinity of the site is between 20 and 22 inches (Hickenbottom and Muir, 1988).

4. Storage Facilities

a. The Oakland Plant stored hazardous waste in 55- gallon drum containers meeting Department of Transportation requirements (copper sulfate was stored in 30-gallon plastic drums). Drums were stored in two locations until they were transported to a recycling facility or disposal site. There are no tanks or other facilities on site used to store hazardous waste.

b. Drum Storage Area -

The dimensions of the Drum Storage Area are 76 feet by 43 feet. It has concrete flooring approximately 6 inches thick (with some superficial cracks in the concrete surface), is surrounded by 6-inch curbing, and is enclosed by a fence with appropriate warning signage. There are no floor drains within the Drum Storage Area. A plug in a pipe through the curbing at one end may be removed to drain rainwater. The plug is otherwise kept in place so that any spills would be contained. Drums were stored on wooden pallets inside the Area. The design capacity of the Drum Storage Area is 256 drums. The time period that the Drum Storage Area was used as a Hazardous Waste Storage Area was from about September 1983 to January 1987. The Oakland Plant's liquid hazardous waste was stored in this Area.

c. Solder Dross Storage Area -

The dimensions of the Solder Dross Storage Area are 40 feet by 8 feet. It consists of a fenced section with appropriate warning signage of an elevated concrete railroad finger dock. The finger dock is open at the sides, but covered by a roof. The design capacity of this Area is approximately 100 drums. The time period that the Solder Dross Storage Area was in operation as a Hazardous

Waste Storage Area was from about mid-1983 to December 1988. The Oakland Plant's solid hazardous waste was stored in this Area.

- d. Attached hereto and incorporated herein by reference are maps of the facility. One map is a portion of a county map showing the location of the Oakland Plant (Exhibit A). Another map (Exhibit B) shows the arrangement of the Oakland Plant, and a more detailed map (Exhibit C) clearly locates and identifies the Solder Dross Storage Area, and the Drum Storage Area, and shows their relationship to other points or structures on the facility property.
- e. The status of the Plant after closure is completed will be non-existence, since the plant is being demolished and the land will be the site of a retail development, specifically, a Kmart retail outlet.

5. Other Facilities On-Site

The Oakland Plant contains no landfills, incinerators, basins, or other such storage or treatment facilities on-site.

B. Waste Characterization (67212(b)(1))

- 1. Attached hereto and incorporated herein by reference are copies of the Oakland Plant's Hazardous Waste Facility Permit (Exhibit D), E.P.A. Forms 3510 (Exhibit E) and 8700-12 (Exhibit F), and the 1985 Generator Annual Hazardous Waste Report for 1986 (Exhibit G), all of which describe hazardous waste operations at the Oakland Plant.
- 2. The following wastes were generated by the Oakland Plant:
 - Spent Solvent (liquid) having RCRA Hazardous Waste No. F003. Composition is:

Methyl Ethyl Ketone Aromatic Hydrocarbon Isopropanol Toluene Benzene Methanol Ethanol

 Lead Solder Dross and Baghouse Dust (solid) having U.S.D.O.T. Class ORM-C and RCRA Hazardous Waste No. D008. No Flash Point. Specific weight is 114 lbs. per cubic foot. Composition is 97% lead, 3% tin and antimony. Waste Petroleum Oil N.O.S. (liquid) having RCRA Hazardous Waste Nos. D008 and D001. Flash Point is 47° C. Specific Gravity is 0.928. Composition is:

Mineral Oil
Methyl Ethyl Ketone
Mineral Spirits
Sulfurized Lard Oil
Activated Resin Flux (Zinc Ammonium Chloride)

• Copper Sulfate (Liquid) having RCRA Hazardous Waste No. D002. No Flash Point. Specific Gravity is over 1. Composition is:

Copper Sulfate Hydrochloric Acid

- 3. The above-referenced wastes were generated at the Oakland Plant as a consequence of ongoing manufacturing operations. However, these wastes are no longer generated.
- 4. As of May, 1987, the following waste streams were discontinued at the Oakland Plant but are listed here only for purposes of clarity:
 - Coating (Paint) Sludge (liquid) having RCRA Hazardous Waste Nos.F003 and F005. The Flash Point is 70° F. 100° F. Specific Gravity is .8 1.0. Composition is:

Xylene Glycol Ether Mineral Spirits

N-Butyl Alcohol

Cellosolve Acetate (ethanol, 2-ethoxyacetate)

Butanol

Ethanol

Aromatic Hydrocarbons

Toluene

Pigments (Zinc and other metal oxides)

 Lacquer (side seam spray) Sludge having RCRA Hazardous Waste Nos. F003, F005, d D001. The Flash Point is 70° F. - 100° F. Specific Gravity is 1.1 - 1.2. Composition is:

Cellosolve Acetate (ethanol, 2-ethoxyacetate) Epoxy Resin Butyl Cellosolve (ethanol, 2-butoxy) Diacetone Alcohol Xylene Methyl Isobutyl Ketone Isopropyl Alcohol

 Waste Hydrochloric Acid Solution (liquid) having RCRA Hazardous Waste No. D002. No Flash Point. Specific Gravity is 1.1 - 1.2. Composition is:

Copper Sulfate Hydrogen Chloride Water

C. Maximum Inventory of Hazardous Waste at Any Time During the Life of the Plant (67212)(b)(2))

The Plant has never exceeded its Maximum Capacity of 356 55-gallon drums.

D. Inventory of Auxiliary Equipment

As stated above, the Oakland Plant only stored hazardous waste in 55-gallon drums, and copper sulfate in 30-gallon plastic drums; thus, the only auxiliary equipment used includes forklifts, pallets, scrapers, a shovel, and a drum dolly.

E. Schedule of Final Closure (67213, 67212(b)(4))

The Closure Plan was submitted at least 180 days prior to initiation of closure. Expected year of final closure is 1995. Closure has or will proceed according to the following steps.

1. Final Wastes Accepted

After approval of the Closure Plan the Plant will not store wastes in the Storage Areas.

- 2. Dates for Completion of Inventory Disposal
 - a. No preprocessing will be necessary.
 - b. No on-site disposal will occur.
 - c. No inventory will be disposed of on-site.
 - d. All inventory has been removed off-site.
- 3. Final Date Facility Decontaminated

Facility was decontaminated in November 1991. No hazardous wastes were stored at the facility since then.

4. Schedule of Final Closure Activities

- a. Submit Closure Plan April 22, 1994
- b. Receive Hazardous Waste Manifests for review April 29, 1994
- c. Submit Modified Sampling and Analysis Plan October 12, 1994
- d. Initiate Confirmation Containment Structure Sampling Plan October 28, 1994
- e. Initiate Confirmation Soil Contamination Sampling Plan October 28, 1994
- f. Submit Draft Final Closure Plan January 9, 1995.
- g. Closure Certification Report to DTSC February 1, 1995
- h. Total Time Required to Close Facility160 days.

5. Final Date Closure Completed

Final Closure is anticipated to be complete by February 15, 1995. Removing any contaminated structures and/or soils, if it is encountered, would add 60 days to the schedule.

6. Justification if Closure is Longer than Six Months

No justification for a longer period is necessary at this time. If contamination is encountered that cannot be addressed within 60 days, DTSC will be advised immediately, and a revised schedule will be proposed.

III. REMOVAL OF ALL INVENTORY (67248)

A. Maximum Amount Processing

1. Total Amount of Waste/Residue in Drums and Number of Drums

There are no drums stored presently at the facility. Maximum quantities ever stored are:

Drum Storage Area

Waste Petroleum Oil Spent Solvent

Copper Sulfate

44 drums 85 drums 3 drums

Sub-total

129 55-gallon drums 3 30-gallon drums

Solder Dross Storage Area

Solder Dross &

Baghouse Dust

28 drums

Residue

4 drums

TOTAL AMOUNT, WASTE & RESIDUE

161 55-gallon drums (8,855 gallons)

3 30-gallon drums (90 gallons)

2. Total Amount of Waste/Residue in Tanks and Number of Tanks

There were and are no tanks used for storage of hazardous waste at the Oakland Plant.

3. Total Amount of Waste/Residue in other Forms of Storage

There were and are no other forms of hazardous waste storage at the Oakland Plant.

B. Pretreatment

Because of the characteristics of the hazardous waste, and the fact that all drums were removed to a recycling center or disposal facility, no pretreatment was necessary at the Oakland Plant.

- C. Methods and Procedures for Treating, Disposing or Removing Inventory
 - 1. On-Site Treatment or Disposal.

There was no on-site treatment or disposal at the Oakland Plant.

- 2. Procedures for Off-Site Removal of Inventory
 - a. Quantity

161 55-gallon drums 3 30-gallon drums

b. Method of Treatment or Disposal

All hazardous waste was removed to permitted or interim status facilities for recycling or disposal consistent with the Oakland Plant's normal disposal practices. Drums were removed to Romic Chemical Corporation, 2081 Bay Road, East Palo Alto, California (EPA ID No. CAD 009452657) (spent solvents); Master Metals, 2850 West 3rd Street, Cleveland, Ohio (EPA ID No. OHD 097613871) (lead dross and baghouse dust); Chemical Waste Management Inc., 35251 old Skyline Road, Kettleman City, California (EPA ID No. CAD 00646117) (waste oil and copper sulfate).

c. Approximate Distance to off-Site TSDF

See III.C.2.b. above.

IV. <u>DECONTAMINATION OF THE FACILITY (67212 (b) (3), 67214, 67248</u>

A. Area of Facility with Potential Soil Contamination

All hazardous waste was stored in drums on concrete pads described previously, and no spills were reported to have occurred. Therefore, a soil sampling and analysis program will be conducted adjacent to the concrete pads in order to confirm the absence of contamination. The program is described in the following section, Confirmation Sampling and Analysis Program.

B. All Equipment and/or Facilities Requiring Cleaning

1. Description of Equipment and Facilities, and Procedures for Cleaning

Because all hazardous wastes were stored in drums inside of the Hazardous Waste Storage Areas, and there were no tanks, surface impoundments or other storage facilities, only the Drum Storage Area, the Solder Dross Storage Area, and appropriate equipment (see IV.B.l.c.) used in the cleanup required decontamination.

Decontamination and cleaning activities were conducted during 1991 and reported on in the Dunn Corporation (now RUST Environment & Infrastructure) document entitled "Hazardous Waste Storage Area Closure Report" dated November 21, 1991. This report was submitted to DTSC in November 1991 and a copy accompanies this Closure Plan.

a. Drum Storage Area

The top one-quarter inch of the surface of the Drum Storage Area was removed by grinding and the ground concrete was collected when the new surface was steam cleaned and triple rinsed with water. All water and other residues were collected and drummed.

b. Solder Dross Storage Area

The Solder Dross Storage Area and the deck leading to it were first swept down thoroughly. The top one-quarter inch of the surface of the Solder Dross Storage Area was removed by grinding and the ground concrete was collected when the new surface was then steam cleaned and triple rinsed with water. Spill containment devices ("pigs") were utilized to contain water and other residues. All water, residues, and pigs were collected, drummed, and disposed of properly.

c. Equipment

All equipment used in the storage of wastes for longer than 90 days was steam cleaned and triple rinsed with water.

d. Owner or Operator Labor or Contractor

As identified in the Closure Report cited above, contractors and sub-contractors (Exeltech, Inc. and Ensco Environmental Services, Inc.) conducted the decontamination activities.

e. Amount of Residues

Residues from decontamination were collected in ten (10) 55-gallon drums.

2. Disposal Method for Residues from Decontamination

- a. No residue was treated or disposed on-site.
- b. All residue and excess water was collected and placed in 55-gallon drums.

c. All residues were sent off-site to:

Romic Chemical Corporation 2081 Bay Road East Palo Alto, California (EPA ID No. CAD 009452657).

C. Confirmation Sampling and Analysis Program

1. Sampling Objectives and Scope

An environmental sampling and analysis program was performed as part of this closure plan between the dates of October 28 and November 2, 1994. The objectives of the program were: 1) to confirm that decontamination of the storage areas has successfully removed any hazardous constituents which may have been present; and, 2) to confirm that there have not been releases of hazardous wastes or constituents to the soils in the vicinity of the two waste management storage areas. The objectives of the program were met by collecting and analyzing 1) concrete chip samples from designated areas within the two storage areas, and 2) discrete interval subsurface soil samples from the perimeter of the storage areas. Procedures utilized conformed to DTSC Permit Writer Instructions for closure of Treatment and Storage Facilities (04/15/93; revisions 3/01/94).

The results of the environmental sampling and analysis program were submitted to the California DTSC in a submittal to Mr. Stephen Krival, dated December 8, 1994. A summary of those results are presented in sections 2 and 3 below.

2. Confirmation Containment Structures Sampling

Solder Dross Storage Area

Six concrete chip samples were collected to characterize the concrete slab for disposal. Four samples (SDSA-1 through SDSA-4) were composited from three individual sampling locations each. Two discrete location samples, SDSA-5 and SDSA-6, were also collected. The locations of the concrete chip samples collected from the Solder Dross Storage Area are shown on Figure 1.

All concrete chip samples were analyzed for TCLP volatile and semi-volatile organic compounds, the 17 CAM metals in Article 3 of Title 22 of the California Code of Regulations, reactivity, corrosivity and ignitability. None of the regulated volatile or semi-volatile organic, or organo-lead compounds was detected in any of the six concrete chip samples analyzed. None of the samples tested RCRA hazardous for reactivity, corrosivity or ignitability. None of the 17 CAM Metals was detected at concentrations exceeding applicable Title 22 Total Threshold Limit Concentrations (TTLC) for California hazardous waste (Table 1). However, lead

was detected in all six concrete chip samples at levels ranging from 94.1 ppm to 775 ppm. These results exceeded the Title 22 Soluble Threshold Limit Concentration (STLC), used to characterize hazardous waste in California, by more than 10-times. Ten times the STLC is a factor typically used as guidance to determine the potential for a material to exceed STLC. Therefore, the laboratory was instructed to perform the California Waste Extraction Test (CWET Test) for lead on these samples to determine the actual STLC and to confirm whether the concrete slab requires disposal as a hazardous waste for lead. As shown on Table 1, the CWET Test results for lead for all concrete chip samples tested were well below the STLC Standard of 5.0 mg/l (ppm).

Drum Storage Area

Six concrete chip samples were collected to characterize the Drum Storage Area concrete slab for disposal purposes. Samples DSA-1 through DSA-4 were composited from three individual sampling locations each and two discrete location samples (DSA-5 and DSA-6) were also collected. The locations of the concrete chip samples collected from the Drum Storage Area are shown on Figure 2.

The samples were analyzed for the same parameters as those listed for the Solder Dross Storage Area concrete chip samples and the analytical results were similar. None of the regulated volatile or semi-volatile organic or organo-lead compounds was detected in any of the samples analyzed and none of the samples tested RCRA hazardous for reactivity, corrosivity or ignitability. None of the 17 CAM Metals was detected at concentrations exceeding applicable Title 22 Total Threshold Limit Concentrations (TTLC's) for California hazardous waste (Table 2). Lead was detected in composite sample DSA-1 (86.9 ppm) and discrete location sample DSA-6 (177 ppm). These levels exceed the applicable STLC by more than 10-times and the laboratory was instructed to perform the CWET Test on these samples to determine their actual STLC for lead. As shown on Table 2, the CWET Test results for lead for all concrete chip samples tested were well below the STLC Standard of 5.0 ppm.

3. Confirmation Soil Sampling

Solder Dross Storage Area

Five soil borings (PB-10, PB-11, PB-11R, PB-12 and PB-13) were drilled through the Solder Dross Storage Area concrete slab to evaluate underlying soil quality. The locations of these borings are shown on Figure 3. Soil samples were collected and analyzed in accordance with the approved sampling and analysis plan. The analytical results from these samples are provided on Tables 3 and 4. Acetone, methylene chloride, and several tentatively identified compounds (TICs) were reported. However, these all appear to be associated with laboratory-related

contamination. Total Petroleum Hydrocarbons as gasoline, diesel or mineral spirits and organo-lead were not detected in any of the samples tested.

Analytical results for metals analyses of soil samples in the Solder Dross Storage Area are provided on Table 4. Two of the deep samples (PB-12.3 and PB-13.2) revealed slightly elevated concentrations of chromium with respect to background samples. However, due to the depth of these samples (approx. 11 feet below grade) we believe that this is a reflection of natural variability of chromium in soils, not detected in the background samples and do not reflect impacts from site activities. These two samples were analyzed by both STLC and TCLP (Toxicity Characteristics Leaching Procedure) chromium. The results of these analyses, previously submitted to the DTSC in a letter to Mr. Stephen Krival dated January 5, 1994, and summarized on Table 4, indicate that the soil at depth is not hazardous for chromium under California Title 22 or under RCRA.

Arsenic was also found in these samples at slightly elevated levels compared to background. However, all arsenic results were well below the guidance of ten times the STLC. The rest of the metals results of soil samples collected in the Solder Dross Storage Area either were not detected, or were detected at a levels that were generally consistent with the concentrations present in the background soil samples (PB-1.1, PB-1.2, PB-1.3, PB-2.1, PB-2.2 and PB-2.3) and well below the guidelines of 10 times the STLC. These soil analytical results indicate that there have been no significant impacts from site operations to the Solder Dross Storage Area concrete pad and underlying soil.

Drum Storage Area

Seven soil borings (PB-3 through PB-9) were drilled in the vicinity of the Drum Storage Area to evaluate underlying soil quality (Figure 4). The analytical results from these samples are provided on Tables 5, 6 and 7. Five of the shallow samples (PB-3.1, PB-4.1, PB-5.1, PB-6.1 and PB-7.1) of base rock collected from immediately beneath the concrete slab contained lead levels which exceeded the STLC by more than 10 times. The zinc concentration in PB-4.1 and the copper in PB-3.1 also exceeded applicable STLC levels by more than 10 times. Therefore, the CWET Test was performed on these samples for these analytes. As shown on Table 7, the CWET test performed on samples PB-3.1, PB-4.1, PB-6.1 and PB-7.1 revealed STLC lead levels of greater than 5.0 ppm. As a result, the soil represented by these samples beneath the Drum Storage Area concrete pad (an approximate 2-foot thick layer of base rock) meets the characteristics of a California hazardous waste for lead.

Benzene, toluene, ethylbenzene and xylenes were detected in sample PB-3.1 (Table 5). Elevated toluene, ethylbenzene and xylenes were detected in some of the other shallow soil samples and in sample PB-3.2, collected at a depth of 4 to 5 feet below grade. Occasional low concentrations (less than 30 ppb) of xylenes and toluene

were detected in some of the intermediate depth samples. Acetone, methylene chloride, and several tentatively identified compounds (TICs) were reported. However, these all appear to be laboratory contaminants.

Four samples (PB-3.1, PB-4.1, PB-5.1, and PB-5.3) contained detectable levels of organo-lead (Table 6). The concentration in sample PB-4.1 (22.4 ppm) exceeded the TTLC regulatory level of 13 ppm. The other three samples exhibited organolead at concentrations below the regulatory level.

Some of the intermediate and deep samples collected in the Drum Storage Area (PB-4.2, PB-5.3, PB-8.2 and PB-9.3) revealed chromium levels that exceeded background conditions (Table 7). However, the shallow fill soil that appears impacted with lead and organic compounds, as discussed above, does not appear to be a source of chromium contamination as the chromium levels in the shallow soils do not exceed background levels. This indicates that the higher levels of chromium found in samples from depth is in fact related to natural background conditions. The four samples were analyzed for STLC and TCLP chromium. The results of these analyses, previously submitted to the DTSC in a letter to Mr. Stephen Krival dated January 5, 1994, and summarized on Table 7, indicate that the soil, at depth, below the DSA is not hazardous for chromium under California Title 22 or under RCRA.

4. Background Soil Samples

Six soil samples were collected from two soil borings (PB-1 and PB-2) that were drilled to evaluate background soil quality. The locations of these borings are shown on Figure 5. The laboratory analytical results for the background soil samples are summarized on Tables 8, and 9. A very low concentration of toluene (8 ppb) was detected in the deep sample (8.5' to 9.5' below grade) in background boring PB-2 (Table 8). No organic compounds, including organo-lead, other than those found in the laboratory method blank (acetone and methylene chloride) were detected in any of the other background samples. The samples were analyzed for the eight RCRA metals plus antimony, copper, thallium and zinc (Table 9). These results were compared to the reference provided by the California DTSC ("Concentrations of Selected Elements in Soils of the Conterminous United States"), published by the United States Geological Survey. The arithmetic mean included in this reference is shown on Table 9. All metals detected in the background samples were at concentrations that are consistent with the arithmetic mean concentrations. Based on these results, we believe that the analytical results from these samples represent true background soil quality for the site.

5. Additional Soil Sampling Plan

Solder Dross Storage Area (SDSA)

An additional soil boring program will be performed to collect soil samples for the purpose of further qualifying the nature of the elevated chromium concentrations at the solder dross storage area (SDSA). A limited access drill rig equipped with 8inch diameter hollow stem augers will be employed to collect soil samples, with a Modified California split spoon sampler, 6-inch long by 2-inch diameter, using stainless steel liners. A California Registered Geologist will supervise the drilling program, examine and secure the soil samples, and deliver said samples to the State Certified chemical analytical laboratory (Anamatrix-San Jose) for analyses of total chromium and hexavalent chromium.

A total of three borings will be advanced: one foot northeast of PB-13 (designated PB-13d); one foot northeast of PB-12 (designated PB-12d); and three feet southeast of the southeast wall of the SDSA (Pb-SDSAb).



One soil sample will be collected from PB-12d at depth interval of 11 to 12 feet, and one from PB-13d at a depth interval of 10 to 11 feet. The depths at which these soil samples will be collected coincide with depths at which the soil samples from PB-12 and PB-13 were collected previously. This will allow for direct quantitative comparison to the past results. The sample from PB-12d and PB-13d will be analyzed for total chromium and hexavalent chromium. These samples will also be analyzed for soluble chromium if the total value is 10 times the acceptable STLC for chromium. Soil samples also will be collected from depths of one foot and six feet from borings PB-12d and PB-13d and analyzed for hexavalent chromium. Additionally, one soil sample will be collected from proposed boring PB-SDSAb at an approximate depth of five feet. This depth of sample collection will be coincidental to the deep samples collected from proposed borings PB-12d and PB-13d. The location of proposed borings PB-12d, PB-13d and PB-SDSAb are shown on Figure 6.

Me If this additional soil sampling confirms the non-hazardous nature of the soils underlying the SDSA concrete pad, those soils will be left in place as a clean closure and the concrete will be removed and disposed of as construction debris.

If required by site construction activities in the near future, the concrete pad and a limited volume of soil may be removed, stored in containment bins, and relocated to the southern site boundary until such time that the CEQA process is completed.

Drum Storage Area (DSA)

An additional soil boring program will be performed at the DSA to collect soil samples for the purpose of: qualifying the nature of the soil contamination previously identified in boring PB-3; defining the vertical and horizontal limit of total inorganic and organic lead surrounding the DSA; and evaluating the nature of the elevated chromium level (204 ppm) detected at a depth interval of 8.5' to 9.5' in previous boring PB-9. The locations of the proposed borings are shown on Figure 7.

The protocol for drilling, sample collection, and submittal to the analytical laboratory will be the same as that for the SDSA.

One boring will be advanced parallel to, and one foot northwest of, previous boring PB-3. Soil samples will be collected at one foot, 4.5 feet, and eight feet deep. These depths are coincidental to the depths at which the soil samples were collected from previous boring PB-3. This will allow for direct quantitative comparison to the past results. That boring will be identified as PB-3d.

The soil samples collected at PB-3d (all three depths) will be analyzed for EPA SW-846 Method 8260 with a library search for tentatively identified compounds, EPA SW-846 Method 8270, TPH-D, TPH-G, and TPH-Mineral Spirits.

Eight shallow soil borings will be advanced, as shown on Figure 7, around the perimeter of the DSA. Soil samples will be collected, from each boring, at depths of one foot and two feet. This will be coincidental to the base rock and the underlying naturally occurring black clay aquitard, respectively, beneath the concrete pad of the DSA. All samples will be analyzed for total lead and organic lead, with instructions to the laboratory to analyze the lead under STLC procedures if the TTLC value exceeds 10 times the acceptable STLC value of 5.0 ug/L.

The concrete has been proven to be non-hazardous, and will be removed and disposed of as construction debris.

The additional soil sampling outlined above will delineate the vertical and horizontal extent of lead contamination. The vertical extent will likely be no deeper than the top of the naturally occurring black clay aquitard beneath the DSA. It is ANCs intent to scrape off the base rock beneath the concrete pad and contain it as lead contaminated hazardous waste. Six confirmatory soil samples will be collected from the top of the black clay aquitard, at selected grid pattern locations, and analyzed for total inorganic lead and organic lead. The laboratory will be instructed to reanalyze, by STLC methods, any sample for which the total inorganic lead concentration exceeds the STLC guideline of 5.0 ppm by more than 10 times.

The base rock removed down to the top of the black clay aquitard will be stored in containment bins and relocated to the southern site boundary until such time that the CEQA process is completed.

We anticipate that the analysis of soil samples from soil boring PB-3d, from beneath the base rock, will confirm that the organic contaminants detected during the previous sampling activities are related to petroleum products. Therefore, this soil will be managed in accordance with procedures currently in place for remediation of Area 4 soils. Based on the results of soil screening by an HNu meter, and the analytical results, a determination will be made as to the amount of soil that would be excavated. Due to the nature of this soil contamination being the same as the Area 4 stockpiled soils, any soil excavated in the area of PB-3d will be added to the Area 4 stockpiled soils (excluding any and all material above the stiff black clay aquitard, i.e. base rock to the top of the clay). We estimate the volume of soil to be excavated would be less than 10 yards of soil.

6. Groundwater Investigation

Solder Dross Storage Area (SDSA)

The following work plan for a groundwater investigation will be implemented at the SDSA. One groundwater monitoring well will be installed within 10 feet of the SDSA, in the down gradient direction of groundwater flow and one monitoring well will be installed within 50 feet of the SDSA, in the upgradient direction. The wells will be 2-inch diameter, threaded, schedule 40 PVC. The groundwater flow direction will be determined from the extensive amounts of historical data and the latest groundwater monitoring event. The wells will be developed 24 hours after completion. The wells will be purged and sampled 72 hours after well development using standard EPA protocol. After purging, groundwater samples will be collected and chemically analyzed for total chromium and hexavalent chromium. The analytical laboratory will be Anametrix, Inc. of San Jose.

Because the previous groundwater sampling results from 1989 and 1991 in the vicinity of the SDSA did not find evidence of chromium (at a detection limit of 10ug/L), we propose that an alternative course of action be considered. At the discretion of the Department and the RWQCB, groundwater monitoring wells will be installed only in the event that the lead or hexavelent or total chromium, as tested by STLC procedures, exceeds 5 mg/L in any of the samples collected from the additional sampling program.

Drum Storage Area (DSA)

The following work plan for a groundwater investigation will be implemented at the DSA. One groundwater monitoring well will be installed within 10 feet of the DSA, in the downgradient direction of groundwater flow. The location, construction, development, and sampling protocol will be the same as that implemented for the SDSA. A groundwater sample will be collected and analyzed for the following parameters; total chromium, hexavalent chromium, total lead, total

organic lead, EPA Method 8240 with open scan, TPH-G/BTEX, TPH-D, and TPH-Mineral Spirits.

Because the previous groundwater sampling results from 1989 and 1991 in the vicinity of the DSA did not find evidence of chromium (at a detection limit of 10ug/L), we propose that an alternative course of action be considered. At the discretion of the Department and the RWQCB, groundwater monitoring wells will be installed only in the event that any of the following is detected from the duplicate soil samples collected in PB-3d during the course of the additional sampling program.

- 1. Any EPA method 8260 or 8270 analytes, not attributable to petroleum hydrocarbons or laboratory agents, that are noted at greater than 1.0 mg/Kg.
- 2. Any petroleum hydrocarbon analyte that are noted at greater than 10 mg/Kg.

7. Equipment Decontamination

All drilling and sampling equipment used for the collection of soil samples will be steam-cleaned prior to the beginning of the drilling program. The equipment will also be steam-cleaned between each borehole to prevent cross contamination. The split spoon sampler and the sampling equipment used to collect concrete chip samples will also be thoroughly cleaned between each sample. At a minimum, this will include a dilute Liquinox or Alconox wash, potable water rinse, distilled water rinse and air dry.

8. Sample Custody

a. Personal Custody Responsibility

Personnel obtaining custody of samples will be responsible for ensuring that the samples are not tampered with from the time they are collected until the time they are delivered to the laboratory.

A sample is under your custody if it is:

- in your possession;
- in your view, after being in your possession;
- in your possession and you place them in a secured location; or
- in a designated secure area.

b. Field Custody Procedures

The procedure for sample documentation, labeling, packaging and shipment summarized below will ensure that the samples arrive at the laboratory with the chain of custody intact. The lead field sampler will be personally responsible for the care and custody of the samples until they are transferred to the Laboratory's Sample Courier, for delivery to the laboratory.

Documentation - The field sampling activities associated with this investigation will be documented. Information to be recorded includes basic site conditions, sequence and duration of events, and field measurements. Activities will be described in as much detail as possible so that persons going to the site could reconstruct a particular situation without reliance on memory.

Samples will be collected following the sampling procedures documented in this Closure Plan. The equipment used to collect samples will be noted, along with the time of sampling, sample description, sample volume, and number of containers. Sample identification numbers will be assigned prior to sample collection. Field duplicate samples, which will receive an entirely separate sample identification number, will be noted under sample description.

Labelling - All bottles will be identified with self-adhesive labels. The labels will show the project name, sample number, sample location, time and data of collection, collectors initials, and intended analysis. Sample labels will be completed in waterproof ink unless prohibited by weather conditions.

Packaging and Shipment - The samples will be packaged for shipment by placing each container in a separate zip-lock storage bag. The bags will then be placed in a cooler with sufficient nonabsorbent packing material to adequately protect the containers from breakage, and with sufficient ice or other coolant materials to maintain the temperatures required for proper preservation of the samples.

Separate chain of custody forms will be completed for each cooler of samples. When transferring the possession of samples, the individuals relinquishing and receiving will sign, data and note the time on the chain of custody form.

D. Health and Safety Plan

All field closure activities at the facility have been, and will continue to be, conducted under the auspices of a site specific Health and Safety Plan (HASP). A copy of the HASP is provided and accompanies this Closure Plan.

V. COST ESTIMATES (67002)

A. The estimated costs herein will be updated annually due to inflation. The method used to calculate the adjusted estimate will be based on the consumer price index, or another industry-accepted factor for inflation and cost adjustments.

Total cost estimate for maximum capacity is \$100,000.00.

- Removal of Hazardous Waste \$12,000.00
- Decontamination (sweep down, steam cleaning and rinsing) \$22,000.00
- Administrative Cost \$3,000.00
- Contingency Cost (20%) \$20,000.00
- Certification Fees \$3,000.00
- Consultants Fees \$12,000.00
- Confirmatory Sampling and Analyses Cost \$25,000.00
- Closure Certification Report Preparation Cost \$3,000.00
- B. An updated Financial Assurance mechanism for the cost estimate will be provided under separate cover. The Financial Assurance mechanism for the estimated costs herein will be updated annually due to inflation.

VI. CLOSURE CERTIFICATION REPORT (67215)

- 1. The following documents will be maintained by the Facility Representative (see section I.A.3.) until the approval of closure certification:
 - a. Approved closure plan
 - b. Copies of the independent qualified professional engineer's field observation reports
 - c. Laboratory results of samples analyzed
 - d. Quality assurance/quality control demonstrations
 - e. Manifests showing disposition of waste inventory

- f. Miscellaneous documentation
- g. Closure certification report
- 2. A Closure Certification Report will be submitted to DTSC and a copy will be maintained by the Facility Representative (see section I.A.3.). The contents of the Report will include
 - a. Certification by an independent registered professional engineer.
 - b. Supervisory personnel description
 - c. Summary of closure activities
 - d. Field engineer observation reports
 - e. Sampling data and analyses
 - f. Discussion of analytical results
 - g. Manifests showing disposition of waste inventory
 - h. Modifications to the approved closure plan
 - i. Photographs of closure/sampling activities

VII. OTHER

A. Survey Plat and Notification In Deed to Agency and Appropriate Local Government Office (67219, 67220)

Because the Oakland Plant stored, but did not dispose of (or treat), hazardous waste on the premises; and no contamination related to the Hazardous Waste Storage Areas will remain after closure; and because no waste will remain on-site for longer than 90 days, a notification is not applicable to this closure.

B. Post-Closure Care Plan (67217)

No Post-Closure Care Plan is required because no hazardous waste will remain on-site.







LEGEND

CPACKS > CONCPETE DARKER LINES ARE PREDOMINANT ORACKS (± 1/8" ADE)

CONCRETE CHAR SAMPLING

SDSA-1

SDSA-2

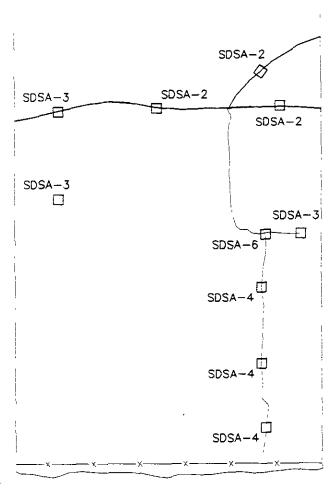
□ SDSA-3

SDSA-4

SDSA-5
SDSA-6

COMPOSITE SAMPLE LOCATIONS

DISCRETE SHMPLE LOCATIONS



RUST ENVIRONMENT & INFRASTRUCTURE

CONCRETE CHIP SAMPLING LOCATIONS SOLDER DROSS STORAGE AREA

AMERICAN NATIONAL CAN COMPANY FORMER GAKLAND, CALIFORN A FACILITY

PROJECT NO. 35195 108

DATE 11/30/94

DWG NO 35195-03

SCALE :"=5"



LEGEND

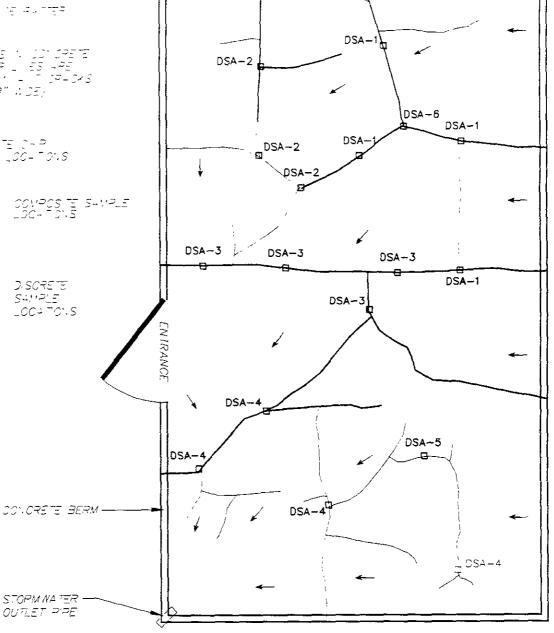
हरू <u>- व्यास्त्र</u>

- 1 1/3,, 4 021 5-2004 | - 1 04-048 0-1048 | - 20 152 0-1048 | - 104 0522

001 09ETE | 05 P SUMPLE LOG- TOWS

00VP0S TE SHMPLE 130-1318 DSA-3 DSA-4

DISCRETE 5411715 1004 7018 DSA-5 DSA-6



DSA-2

STORMNATER OUTLET PPE

CONCRETE CHIP SAMPLING LOCATIONS DRUM STORAGE AREA

AMERICAN NATIONAL CAN COMPANY FORMER CAKLAND, CAL FORNIA FACIL TY

PROJECT NO. 35195108

DATE 11/30,94

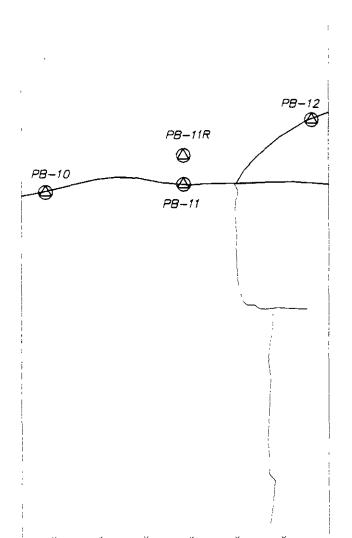
DWG NO 35195-11

SCALE 1"=10"



PB-13

-_----



· LEGEND

CRACKS TO CONCRETE DARKER LIVES ARE PREDOMINANT CRACKS (± 1/8" WDE)



SOIL BORING LOCATIONS SOLDER DROSS STORAGE AREA

AMERICAN NATIONAL CAN COMPANY FORMER DAKLAND, CALIFORNIA FACILITY

PROJECT NO 35195 108

DATE 11/30/94

DWG. NO 35195-13

SCALE 1"=5"

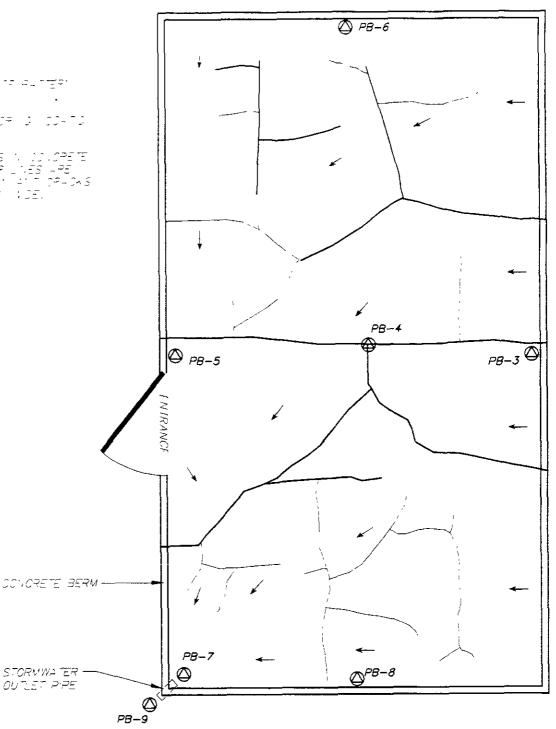


LEGEND

19_ 11 01 EE9

⊘ *P8-4*

30 . ∃2₹ 3



STORMWATER OUTLET PIPE

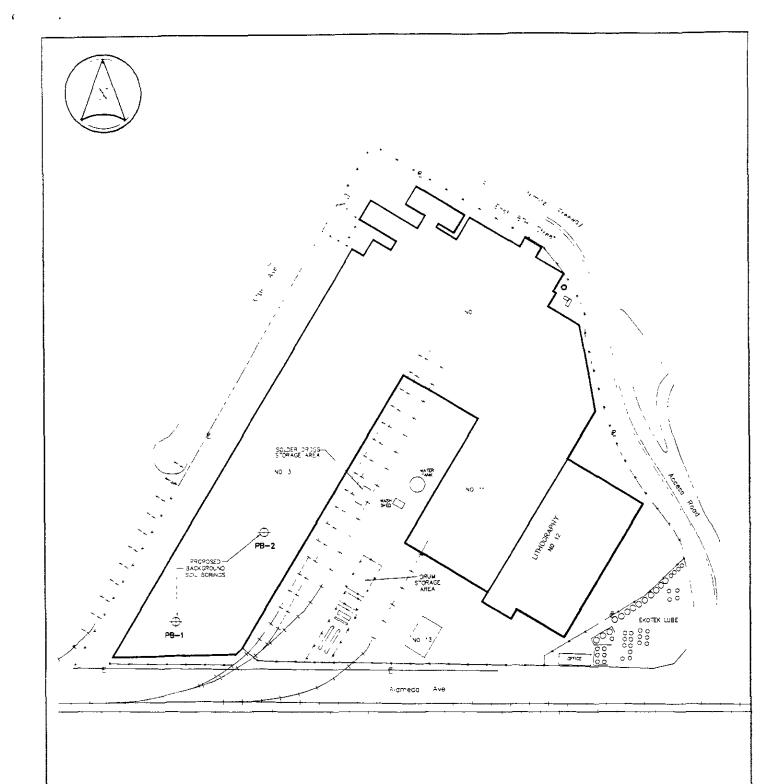
SOIL BORING LOCATIONS DRUM STORAGE AREA

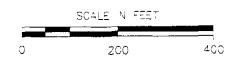
AMERICAN NATIONAL CAN COMPANY FORMER DAKLAND, CALIFORNIA FACILITY

PROJECT NO 35195,108 DATE 41/30/94

DWG NO. 35195-12

SCALE 1"=10'





PROPOSED BACKGROUND SOIL BORING LOCATIONS

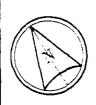
AMERICAN NATIONAL CAN CO. FORMER DAKLAND, DAL'FORNIA FACILITY

ALAMEDA COUNTY, CA FOWN OF CAKLAND

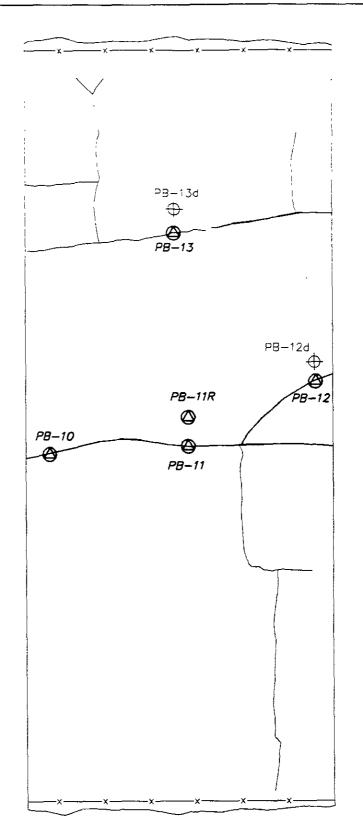
PROJECT NC 35195 108

DATE 11 / 30, '94 DWG NO 35195-06

SCALE 1"=200'



1



PB-SDSAb

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· <u>LEGEND</u>

CRACKS IN CONCRETE (DARKER LINES ARE PREDOMINANT CRACKS— + 1/8" WIDE)

PB−10

SOIL BORING LOCATION

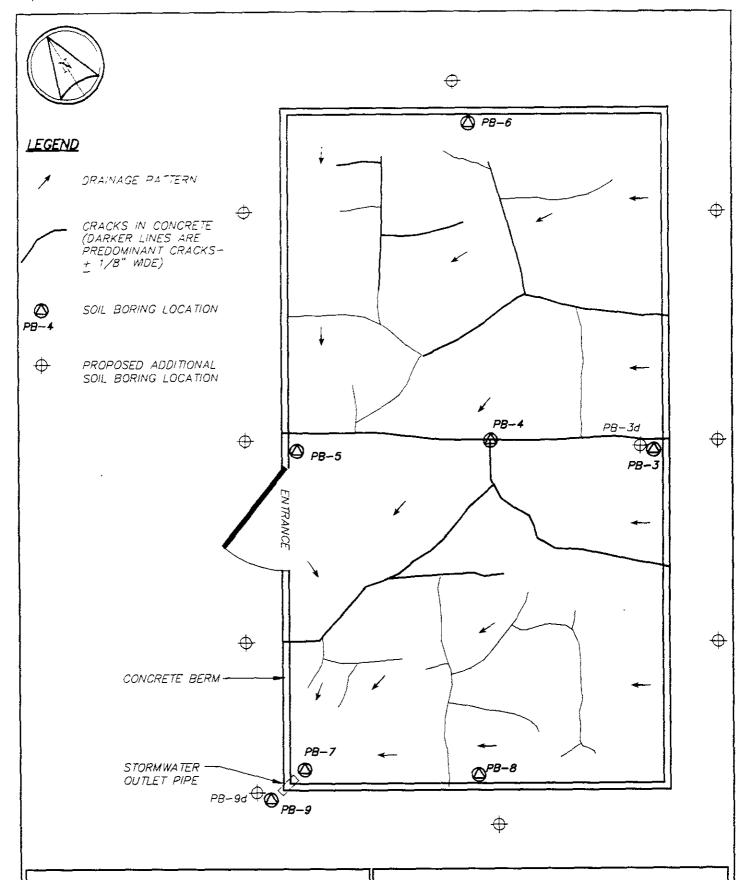
PB-13d ⊕ PROPOSED ADDITIONAL SOIL BORING LOCATION

RUST ENVIRONMENT & INFRASTRUCTURE

PROPOSED ADDITIONAL SOIL BORING LOCATIONS SOLDER DROSS STORAGE AREA

AMERICAN NATIONAL CAN COMPANY FORMER GAKLAND, CALIFORNIA FACILITY

PROJECT NO. 35195.108 DATE 1/4/95 DWG. NO. 35195-14 SCALE 1"=5" FIGURE NO. 6



ENVIRONMENT & INFRASTRUCTURE

PROPOSED ADDITIONAL SOIL BORING LOCATIONS
DRUM STORAGE AREA

AMERICAN NATIONAL CAN COMPANY FORMER OAKLAND, CAUFORNIA FACILITY

PROJECT NO. 35195.108 DATE 1/4/95 DWG. NO. 35195-15 SCALE 1"=10" FIGURE NO. 7

TABLES

Inorganic Analytical Data

FORMER AMERICAN NATIONAL CAN COMPANY FACILITY OAKLAND, CALIFORNIA

Solder Dross Storage Area - Concrete Chip Sampling

	STLC	10 X	<u></u>					
Analyte	Standard	STLC Std.	SDSA-1	SDSA-2	SDSA-3	SDSA-4	SDSA-5	SDSA-6
Antimony	15	150	_			-		-
Arsenic	5.0	50	4.6	3.3	4.2	2.7	2.8	4.0
Barium	100	1000	143	138 I	151 I	120 I	131 I	182 I
Beryllium	0.75	7.5	-	-	- '	-	-	-
Cadmium	1.0	10	3.4 I	-	_	-	-	- 1
Chromium	5.0	50	37.6	35.4	39.4	32.5	29.0	41.3
Cobalt	80	800	-	-	- '	-	-	-
Copper	25	250	38.9	23.9	78.5	25,4	22.0	32.1
Lead (TTLC)	5.0	50	494	198	775	94.1	188	431
Lead (STLC)	5.0	NA	0.95	3.7	3.3	1.1	0.40	1.5
Mercury	0.2	2	-	-	-	-	-	- 1
Molybdenum	350	3500	-	-	-	-	~	-
Nickel	20	200	47.8 I	42.5 I	40.7 I	38.7 I	51.6 I	44.9 I
Selenium	1.0	10	-	-		_	-	
Silver	5	50	-	-	-	-	-	-
Thallium	7.0	70	-	-	-	-	-	- 1
Vanadium	24	240	32.3	32.3	30.6	33.7	29.9	36.9
Zinc	250	2500	541	451	422	125	148	400
рН	<u></u>		12.2	12.2	12.2	12.3	12.3	12.3

All metals results expressed in ppm.

Sampling Dates: November 1 and 2, 1994

TTLC = California Title 22 Total Threshold Limit Concentration

STLC = California Title 22 Soluble Threshold Limit Concentration

94.1 Indicates a result that exceeded the applicable STLC level by more than 10 times.

NA: Indicates guidance value is not applicable to this test.

-: Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

I: Sample was diluted do to spectral interferences.

TABLE3.XLS 1/6/95

Inorganic Analytical Data

FORMER AMERICAN NATIONAL CAN COMPANY FACILITY OAKLAND, CALIFORNIA

Drum Storage Area - Concrete Chip Sampling

		10 X			[ļ	1	γ
Analyte	STLC	STLC	DSA-1	DSA-2	DSA-3	DSA-4	DSA-5	DSA-6
Antimony	15	150	-]] "		- "	-
Arsenic	5.0	50	3.3	2.2	3.2	2.5	3.7	2.9
Barium	100	1000	291.0 I	221.0	350.0 I	284.0 I	289.0 I	253.0 I
Beryllium	0.75	7.5	-	-	-	-	-	-
Cadmium	1.0	10	-	} -	} _	-	-	-
Chromium	5.0	50	45.6	29.9	45.8	42.1	43.4	37.0
Cobalt	80	800	-	-	10.5 I	-		! -
Copper	25	250	29.3	20.1	30.5	25.8	25.1	55.4
Lead (TTLC)	5.0	50	86.9	18.9	34.1	38.4	25.9	177.0
Lead (STLC)	5.0	NA	0.27	l na	na	na	na	-
Mercury	0.2	2	-] -	-	-	-	0.19
Molybdenum	350	3500	-	{ -	} ~	} -	i -) -
Nickel	20	200	81.8	64.2 I	85.9 I	62.5 I	142.0 I	83.5 1
Selenium	1.0	10	0.89	0.71	0.69	0.68	0.63	0.57
Silver	5	50	-	-	} -] -] -	_
Thallium	7.0	70	-	} -	} -	} -	-	-
Vanadium	24	240	48.3	39.0	56.8	55.0	51.0	45.7
Zinc	250	2500	181.0	87.7	286.0	180.0	176.0	185.0
pН			11.0	11.0	9.5	10.5	11.1	11.2

All metals results expressed in ppm.

Sampling Dates: November 1 and 2, 1994

TTLC = California Title 22 Total Threshold Limit Concentration

STLC = California Title 22 Soluble Threshold Limit Concentration

94.1 Indicates a result that exceeded the applicable STLC level by more than 10 times.

na: Indicates analysis was not performed.

NA: Indicates guidance value is not applicable to this

-: Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

I: Sample was diluted do to spectral interferences.

TABLE6.XLS 1/6/95

Volatile Organic Analytical Data

Former American National Can Company Facility Oakland, California

Solder Dross Storage Area - Confirmation Soil Sampling

Soil Boring ID			PB - 11R	
Sample Depth	0.5' - 1.1'	PB - 10 5.0' - 6.0'	10.5' -11.5'	0.5' - 1.5'
Compound Sample ID	PB10.1	PB10.2	PB10.3	PB11R.1
Chloromethane		-		-
Vinyl Chloride	_	-	-	_
Bromomethane	_	_	_	_
Chloroethane	_	-	-	_
Trichlorofluoromethane	_	-	i -	_
1, 1-Dichloroethene	_	_	_	-
Trichlorottifluoroethane	_	_		- 1
Acetone	58 B	23 B	_	51 B
Carbon Disulfide	•		_	-
Methylene Chloride	17 S	15 S	11 S	11 S
Trans-1,2-Dichloroethene	-	_	_	-
1.2-Dichloroethane	_	_	-	_
Cıs-1,2-Dichloroethene	_	_	_] _
2-Butanone	_	_	_	_
Chloroform	_	_	_	_
1,1,1-Trichloroethane	-	_	_	_
Carbon Tetrachloride	-	-	_	_
Vinyl Acetate	_	_		_
Benzene	_	_	-	_
1.2-Dichloroethane	-	-	-	-
Trichloroethene	-	-		_
1, 2-Dichloropropane	_	-	-	_
Bromodichloromethane	-	-	_	_
Cis-1, 3-Dichloropropene	_	-		-
4-Methyl-2-Pentanone	-	-	-	_
Toluene	-	8		-
Trans-1, 3-Dichloropropene	-	-	-	-
1,1, 2-Trichloroethane	-	-	_	-
Tetrachioroethene	-	-	-	-
2-Hexanone	-	} -	-	-
Dibromochloromethane	-	_	-	-
Chlorobenzene	-	_	-	-
Ethylbenzene	-	-		-
Xylene(total)	-	-	-	-
Styrene	-	_	-	-
Bromoform	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-
T I.C. (Total)	380 BJ	500 BJ	410 BJ	740 BJ

All results expressed in ug/kg (ppb).

Sampling Dates: October 28 and 29, 1994

1 1/5/95 •

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

B: Compound was detected in the associated method blank.

S: Although compound was not detected in the associative method blank, the result is suspected laboratory related.

J: Compound was detected below the reporting limit, it is an estimated concentration. TICs are always estimated concentrations.

Volatile Organic Analytical Data

Former American National Can Company Facility Oakland, California

Solder Dross Storage Area - Confirmation Soil Sampling

Soil Boring ID		PB-12	PB - 13		
Sample Depth	0.5' - 1.5'	6.5' - 7.5'	11.0' - 12.0'	0.5' - 1.5'	10.0' - 11.0'
Compound Sample ID	PB12.1	PB12.2	PB12.3	PB13.1	PB13.2
Chloromethane		- "	-		
Vinyl Chloride	-	-	-	-	-
Bromomethane	-	-	-	-	-
Chloroethane	-	-	-	-	-
Trichlorofluoromethane	-	-		-	ļ -
I, I-Dichloroethene	~	-	-	-	-
Trichlorotrifluoroethane	-	-	-	-	-
Acetone	32 B	170 B	21 B	35 B	34 B
Carbon Disulfide	~	-	-	-	-
Methylene Chloride	7 S	12 S	25 S	17 S	21 S
Trans-1,2-Dichloroethene	-	-	-	-	_
1,2-Dichloroethane	-		_	-	-
Cis-1,2-Dichloroethene	-	-	-	-	-
2-Butanone	ala.	31	-	ļ -	-
Chloroform	-	-	_	-	-
1,1,1-Trichloroethane	•	_	-	-	_
Carbon Tetrachloride	*	-	-	-	-
Vinyl Acetate	-	-	-	-	-
Benzene	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-
Trichloroethene	-	-	_	_	-
1, 2-Dichloropropane	-	_	-	_	_
Bromodichloromethane	-	-	-	-	-
Cis-1, 3-Dichloropropene	-	_	-	_	-
4-Methyl-2-Pentanone	-	-	-	-	-
Toluene	-	-		•	-
Trans-1, 3-Dichloropropene	-	-	_	-	-
1,1,2-Trichloroethane	=	-	•	-	-
Tetrachloroethene	-	-	_	-	-
2-Hexanone	-	-	_	-	-
Dibromochloromethane	-	-	-	1 -	-
Chlorobenzene	_	-	_	-	-
Ethylbenzene	_	_	i -	_	_
Xylene(total)	-	-	-	-	-
Styrene	_	-	-	-	_
Bromoform	•	_	_	-	-
1,1,2,2-Tetrachloroethane	_	-	-	-	-
1,3-Dichlorobenzene	•	~	-	-	-
1,4-Dichlorobenzene	, -		_	-	-
1,2-Dichlorobenzene	-	-	-	-	-
T.I.C. (Total)	740 BJ	750 BJ	690 BJ	670 BJ	570 BJ

All results expressed in ug/kg (ppb).

Sampling Dates: October 28 and 29, 1994

2 1/5/95

^{- .} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

B: Compound was detected in the associated method blank.

S: Although compound was not detected in the associative method blank, the result is suspected laboratory related.

J: Compound was detected below the reporting limit, it is an estimated concentration. TICs are always estimated concentrations.

Table 4

Inorganic Analytical Data

Former American National Can Company Facility Oakland, California

Solder Dross Storage Area - Confirmation Soil Sampling

		Boring ID		PB - 10		PB - 11R		PB-12		PH	- 13
ļ	S	Sample Depth	0.5' - 1.1'	5.0' - 6.0'	10.5' -11.5'	0.5' - 1.5'	0.5' - 1.5'	6.5' - 7.5'	11.0' -12.0'	0.5' - 1.5'	10.0' -11.0'
		Sample ID	PB10.1	PB10.2	PB10.3	PB11R.1	PB12.1	PB12.2	PB12.3	PB13.1	PB13.2
}	STLC	10 X				ļ					
Analyte	Standard	STLC Std.	<u> </u>				<u> </u>				
Antimony	15	150	-		-		-	-	~	-	-
Arsenic	5.0	50	10.0	14.8	2.1	14.3	13.4	3.7	3.2	24.2	5.3
Barium	100	1000	90.0	147.0	103.0	94.4	75.0	240.0	131.0	87.7	195.0
Cadmium	1.0	10	_	-		-	-			-	
Total Chromium (TTLC)	5.0	50	4.2	18.6	76.2	4.1	4.2	72.6	102.0	4.1	120.0
Total Chromium (STLC)	5.0]	na	na	na	na	na	na	0.10	l na	0.16
Total Chromium (TCLP)		} }	na	na	na	na	na	na	-	na	-
Copper	25	250	8.0	17.1	16.3	15.6	8.0	24.4	21.8	15.9	29.5
Lead	5.0	50	9.2	40.0	5.0	18.4	17.7	35.5	7.7	10.7	8.8
Mercury	0.2	2	0.12	0.10	0.20	-	0.19	-	0.12	0.16	-
Selenium	1.0	10	_	-	-	-	-	-	-	-	_
Silver	5	50	-	-	} -	-	} -	-	_	-	-
Thallium	7.0	70	-	-	[-	-		_		-	-
Zinc	250	2500	222.0	86.4	34.1	105.0	603.0	41.5	34.3	233.0	44.5
рН		Į į	9.5	8.8	7.9	8.4	8.2	8.1	8.0	_6.4	8.0

All metals results expressed in mg/kg (ppm).

Sampling Dates: October 28 and October 31, 1994

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

^{76.2} Indicates a result that exceeded the applicable STLC level by more than 10 times.

H: Spike percent recovery was outside laboratory control limit due to interferences from relatively high concentration level at the analyte in the unspiked sample.

Volatile Organic Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

Soil Boring ID		P	B-3		PB - 4
Sample Depth		1.0' - 2.0'	4.5' - 5.5'	8.5' -9.5'	1.0' - 2.0'
Compound Sample ID	PB3.1	PB3.1RE	PB3.2	PB3.3	PB4.1
Chloromethane			-	-	-
Vinyl Chloride	-	-	-	-	-
Bromomethane	-	i -	-	-	-
Chloroethane	-] -	-	-	-
Trichlorofluoromethane	-	-	-	-	-
1, 1-Dichloroethene	-	-	-	-	-
Trichlorotrifluoroethane	. -	-	-	-	-
Acetone	380 B	48 B	480 B	160 B	210 B
Carbon Disulfide	6	-	-	-	-
Methylene Chloride	16 B	6 S	-	-	-
Trans-1,2-Dichloroethene	· -	-	_	-	-
1,2-Dichloroethane	-	-	-	-	-
C1s-1,2-Dichloroethene	-	-	-	-	-
2-Butanone	-	_	-	-	-
Chloroform	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-
Vinyl Acetate	-	-	-	-	-
Benzene	58	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-
Trichloroethene	-	-	-	-	-
1, 2-Dichloropropane	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-
Cis-1, 3-Dichloropropene	-	-	-	-	-
4-Methyl-2-Pentanone	-	-	-	-	-
Toluene	630 E	13	81	-	_
Trans-1, 3-Dichloropropene	-	-	-	-	-
1,1, 2-Trichloroethane	_	-	-	-	_
Tetrachloroethene	İ -	_	1 -	1 -	-
2-Hexanone	_	_	_	_	_
Dibromochloromethane	-	_] -	-	1
Chlorobenzene	_	-	-	-	-
Ethylbenzene	770 E	_	330	-	110
(Xylene(total)	4400 E	12	3300	_	570
Styrene	-		-	-	_
Bromoform	-	-	-	-	-
1,1,2,2-Tetrachioroethane	-	-	-	_	_
1,3-Dichlorobenzene	-	_	_	-	-
1,4-Dichlorobenzene	-	-	-	-	-
1,2-Dichlorobenzene	-	-	_	-	-
T.I.C (Total)	2500 J	92 BJ	22000 J	<u>20</u> J	2800 J

All results expressed in ug/kg (ppb).

Sampling Dates: October 28 and 29, 1994

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

B: Compound was detected in the associated method blank.

S: Although compound was not detected in the associative method blank, the result is suspected laboratory related.

J: Compound was detected below the reporting limit, it is an estimated concentration. TICs are always estimated concentrations.

E: Amount reported exceeded the linear range of the instrument.

Volatile Organic Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

	Soil Boring ID	PB	-4		PB-5	
	Sample Depth	4.5' - 5.5'	8.5' - 9.5'	1.0' - 2.0'	4.5' - 5.5'	8.5' - 9.5'
Compound	Sample ID	PB4.2	PB4.3	PB5.1	_PB5.2	PB5.3
Chloromethane		-	-	-	-	-
Vinyl Chloride			-	-	-	-
Bromomethane	}	-	-	-	-	-
Chloroethane	1	-	-	-	-	-
Trichlorofluorom	ethane	-	-	-	-	-
1, 1-Dichloroethe	ene	-	-	-	-	-
Trichlorotrifluor	oethane (-	-	- (-	-
Acetone		78 B	86 B	33 B	40 B	31 B
Carbon Disulfide	,	-	-	-	-	-
Methylene Chlor	ıde	9 B	11 B	8 B	11 B	11 S
Trans-1,2-Dichlo		-	-	-	-	-
1,2-Dichloroetha		-	<u> </u>	-	-	-
Cis-1,2-Dichloro	ethene	•	-		-	-
2-Butanone	}	_	-	-	-	-
Chloroform		*	-	-	-	-
1,1,1-Trichloroes	hane	-	-	- !	-	-
Carbon Tetrachlo	onde	-	-	-	-	-
Vinyl Acetate	(-		-	-
Benzene ·		-	-	-	-	-
1,2-Dichloroetha	ne	~	-	[- i	-	-
Tnchloroethene		-	-	-	-	-
1, 2-Dichloropro	pane	-	-	-	-	-
Bromodichlorom		-	-	_	-	-
Cis-1, 3-Dichlore	opropene	-	-	-	-	-
4-Methyl-2-Pent		-	-	-	-	<u> </u>
Toluene		-	-	6	6	_
Trans-1, 3-Dichl	oropropene	-	-	-	-	-
1,1, 2-Trichloroe	thane	-	-	_	-	-
Tetrachloroethen	e s	-	-	_	-	} -
2-Hexanone		-	-	_	-	-
Dibromochlorom	nethane	-	_	_	-	-
Chlorobenzene	1	-	-	-	-	-
Ethylbenzene	Į	-	-	-	-	-
Xylene(total)		-	-	-	-	-
Styrene	1	-	-		-	-
Bromoform	Ì	• -	-	-	-	-
1,1,2,2-Tetrachlo	oroethane	-	_	-	-	-
1,3-Dichloroben		-	-	-	-	-
1,4-Dichloroben		-	-	-	-	
1,2-Dichloroben		_	-	-	-	-
T I.C. (Total)	ĺ	56 J	7 J	10 J	-	38 BJ

All results expressed in ug/kg (ppb).

Sampling Dates: October 28 and 29, 1994

2 1/5/95

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

B: Compound was detected in the associated method blank.

S: Although compound was not detected in the associative method blank, the result is suspected laboratory related.

J: Compound was detected below the reporting limit, it is an estimated concentration. TICs are always estimated concentrations.

Volatile Organic Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

	Soil Boring ID		PB-6			PB-7	
	Sample Depth	1.0' - 2.0'	3.5' - 4.5'	8.5' - 9.5'	0.5' - 1.5'	3.5' - 4.5'	8.5' - 9.5'
Compound	Sample ID	PB6.1	PB6.2	PB6.3	PB7.1	PB7.2	PB7.3
Chloromethane		-	-	-	-	-	-
Vinyl Chlonde		_	-	-	-	-	-
Bromomethane		-	-	+	- ,	-	-
Chloroethane	1	-	-	-	-	-	-
Trichlorofluorome	thane	-	-	-	- 1	-	-
I, I-Dichloroethen	ie	-	-	<u>-</u>	-	-	-
Trichlorotrifluoroe	thane	-	-	-	-	-	-
Acetone	İ	24 B	120 B	31 B	99 B	55 B	20 B
Carbon Disulfide	}	-	-	-	-	-	-
Methylene Chlond	le	17 S	16 S	14 S	21 S	12 S	9 S
Trans-1,2-Dichlore		-	-	-	-	-	_
1,2-Dichloroethan		- .	-	_	-	-	-
Cis-1,2-Dichloroet	thene	-	_] _	-	-	_
2-Butanone		_	24	_	21	-	_
Chloroform		_	-	-	-	-	_
l 1,1,1-Trichloroeth	ane	-	-	-	-	-	~
Carbon Tetrachlor	ide	- .	-	-	_	-	-
Vinyl Acetate	Ì	_] -	-	-	_
Benzene		- :	-	-	-	-	-
1,2-Dichloroethan	e i	-	_	-	-	-	_
Trichloroethene	ļ	-	-	_	_	-	_
I, 2-Dichloropropa	ane	_	_	-	_	-	-
Bromodichlorome		-	-	-	-	-	_
Cis-1, 3-Dichlorop	ropene	-	_	-	_	-	-
4-Methyl-2-Pentar		+	-] -	-	-	<u>-</u>
Toluene	Į.	20	20	7	29	13	_
Trans-1, 3-Dichlor	opropene	-	-	-	_	-	_
1,1, 2-Trichloroeth		-	_	-	,	-	-
Tetrachloroethene		-	_	_	_	-	-
2-Hexanone	j	•	_	<u> </u>	_	-	-
Dibromochlorome	thane	-	_	ł -	_	_	_
Chlorobenzene		-	-	<u>-</u>	_	-	~
Ethylbenzene	Į.	-	_	_		-	_
Xylene(total)	1	-	13			-	_
Styrene	}	-	_	-	_	_	-
Bromoform	ļ	-	_	_	_	_	-
1,1,2,2-Tetrachlor	oethane	-	-	_]	_] -
1,3-Dichlorobenze	,	-	_	-	_	_	
1,4-Dichlorobenze	-	•	_	_		-	_
1,2-Dichlorobenze	f	•	-	-	_	-	-
T.I.C. (Total)	ļ	570 BJ	737 BJ	560 BJ	548 BJ	110 BJ	50 BJ

All results expressed in ug/kg (ppb).

Sampling Dates: October 28 and 29, 1994

3

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

B: Compound was detected in the associated method blank.

S: Although compound was not detected in the associative method blank, the result is suspected laboratory related.

J: Compound was detected below the reporting limit, it is an estimated concentration. TICs are always estimated concentrations.

Table 5

Volatile Organic Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

Soil Boring	TD .	PB-8		<u> </u>	PB-9	·
Sample De		4.0' - 5.0'	8.5' - 9.5'	0.5' - 1.5'	4.0' - 5.0'	8.5' - 9.5'
Compound Sample		PB8.2	PB8.3	PB9.1	PB9.2	PB9.3
Chloromethane	-	-	-	-	-	-
Vinyl Chlonde	-	_	-	-	_	-
Bromomethane	<u>-</u>	-	-	-	-	-
Chloroethane			_	- 1	-	-
Trichlorofluoromethane	_	-	-	_	-	-
1, 1-Dichloroethene	-	_	-	- :	-	-
Trichlorotrifluoroethane	-	-	-	-	-	-
Acetone	130 B	75 B	28 B	120 B	20 U	60 B
Carbon Disulfide		-	-	-	-	-
Methylene Chloride	10 S	98	6 S	13 S	5	15
Trans-1,2-Dichloroethene	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-		-	į -
Cis-1,2-Dichloroethene	-	-	-		-	-
2-Butanone	30	-	_	26	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	_	-	-	-	-	ļ -
Carbon Tetrachloride	-	-	-	-	-	-
Vinyl Acetate	-	<u> -</u>	-	-	-	-
Benzene	_	-	-	-	-	-
1,2-Dichloroethane	-		-	-	-	
Trichloroethene	-	-	-	-	-	-
1, 2-Dichloropropane	-	_	-	-	-	-
Bromodichloromethane		-	-	-	-	-
Cis-1, 3-Dichloropropene	-	-	-	-	-	-
4-Methyl-2-Pentanone	-	-	•	-	-	-
Toluene	14	15	-	23	-	-
Trans-1, 3-Dichloropropene	-	-	-	-	-	-
1,1, 2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-
2-Hexanone	-	-	-	-	-	_
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene		-	_	-	-	-
Ethylbenzene	-] -	-	-	-	ļ -
Xylene(total)	-	-	-	66	-	
Styrene	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	_	-	-	-	-
I,2-Dichlorobenzene	-	-	-	-	-	-
T.I.C. (Total)	230 BJ	235_BJ	250 BJ	376 BJ	100 BJ	380_BJ

All results expressed in ug/kg (ppb).

Sampling Dates: October 28 and 29, 1994

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

B: Compound was detected in the associated method blank.

S: Although compound was not detected in the associative method blank, the result is suspected laboratory related.

J: Compound was detected below the reporting limit, it is an estimated concentration. TICs are always estimated concentrations.

Table 6

Total Petroleum Hydrocarbon/Alcohol Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

Soil Boring ID		PB-3		1	PB - 4	i	PB - 5
		4.5' - 5.5'	8.5' -9.5'	1.0' - 2.0'	4.5' - 5.5'	8.5' - 9.5'	1.0' - 2.0'
Sample ID	PB3.1	PB3.2	PB3.3	PB4.1	PB4.2	PB4.3	PB5.1
lcohols							
			i 				ļ
ĺ	-	-	-	- i	-	-	-
	_	-	-	-	-	~	
	_	-	-	-	.	-	-
H (LUFT)							
3	-	<u> </u>	-	2.1	-	~	_
sel	6500	1000	-	100	-		19
neral Spirits		260	-	-	-	-	<u>.</u>
ead (LUFT)	3.9	-	_ (22.4	-	-	0.77
	Sample Depth Sample ID Icohols ethod 8015A) I (LUFT) sel	Sample Depth Sample ID 1.0' - 2.0' PB3.1 Icohols ethod 8015A)	Sample Depth 1.0' - 2.0' 4.5' - 5.5' PB3.1 PB3.2	Sample Depth 1.0' - 2.0' 4.5' - 5.5' 8.5' - 9.5' PB3.1 PB3.2 PB3.3	Sample Depth 1.0' - 2.0' 4.5' - 5.5' 8.5' - 9.5' 1.0' - 2.0' PB3.1 PB3.2 PB3.3 PB4.1	Sample Depth Sample ID	Sample Depth Sample ID PB3.1

All results expressed in mg/kg (ppm).

Sampling Dates: October 28 and October 31, 1994

-: Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

1

Table 6

Total Petroleum Hydrocarbon/Alcohol Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

Soil Boring ID	PE	3 - 5		PB-6		Pl	3-7
Sample Depth		8.5' - 9.5'	1.0' - 2.0'	3.5' - 4.5'	8.5' - 9.5'	0.5' - 1.5'	3.5' - 4.5'
Analysis Sample ID	PB5.2	PB5.3	PB6.1	PB6.2	PB6.3	PB7.1	PB7.2
Alcohols (EPA Method 8015A) 2-propanol	_	_	_	-	_	_	_
12 propunos			ļ		ļ	:	
Methanol	-	-	-	-	-	-	-
Ethanol	•	-	<u>-</u>	-	-	-	-
TPH (LUFT) TPH as Gas	_	_	-	_	-	_	-
TPH as Diesel		-	35	-	-	-	-
TPH as Mineral Spirits	-	-	-	_	_	_	-
Organic Lead (LUFT)	<u>-</u>	0.77	_	_	•	-	-
	Ì	<u> </u>	<u> </u>		L	<u> </u>	

All results expressed in mg/kg (ppm).

Sampling Dates: October 28 and October 31, 1994

2

^{- ;} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

Table 6

Total Petroleum Hydrocarbon/Alcohol Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

	Soil Boring ID	PB - 7		PB-8			PB-9	
	Sample Depth		2.0' - 3.0'	4.0' - 5.0'	8.5' - 9.5'	0.5' - 1.5'	4.0' - 5.0'	8.5' - 9.5'
Analysis	Sample ID	PB7.3	PB8.1	PB8.2	PB8.3	PB9.1	PB9.2	PB9.3
ľ	dcohols (ethod 8015A)	-	-	-	_	-	-	-
Methanol		-	-	-	-	-	-	-
Ethanol		~	-		-	-	-	-
TP TPH as Gas	H (LUFT)	<u>-</u>	_	-	_	_	-	-
TPH as Die	esel	-	-	-	-	-	-	_
TPH as Mi	neral Spirits	-	-	-		-	-	-
Organic L	ead (LUFT)	<u>-</u>	<u>-</u>	-	-	-		_

All results expressed in mg/kg (ppm).

Sampling Dates: October 28 and October 31, 1994

-: Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

3

Inorganic Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

		Boring ID	<u> </u>	PB-3	uon son sam	(PB - 4		PB5.1
	S	ample Depth	1.0' - 2.0'	4.5' - 5.5'	8.5' - 9.5'	1.0' - 2.0'	4.5' - 5.5'	8.5' - 9.5'	1.0' - 2.0'
		Sample ID	PB3.1	PB3.2	PB3.3	PB4.1	PB4.2	PB4.3	PB5.1
	STLC	10 X			İ	ĺ			
Analyte		STLC				(
Antimony	15	150	-	-	-	-	-	-	-
Arsenic	5.0	50	6.4	1.6	3.7	7.1	2.9	1.7	8.4
Barium	100	1000	491.0	213.0	116.0	388.0	133.0	95.8	106.0
Cadmium	1.0	10	1.4	_		2.1			~
Total Chromium (TTLC)	5.0	50	73.3	78.9	65.0	56.7	107.0	62.6	13.9
Total Chromium (STLC)	5.0		na	na	na	na	0.12	na	na
Total Chromium (TCLP)			<u>na</u>	na	na	na	-	na	na
Copper (TTLC)	25	250	264.0	24.2	17.3	91.2	20.9	17.8	32.1
Copper (STLC)	25	NA		h na	na	na	na	na	na
Lead (TTLC)	5.0	50	3220.0 H	8.6	6.8	5740.0 H	9.7	5.9	155.0
Lead (STLC)	5.0	NA	489	na	na	14.9	na	na	na
Mercury	0.2	2	0.1	-	0.18	0.37	0.38	0.83	0.15
Selenium	1.0	10	-	ļ -	-	-	-	-	-
Silver	5	50	64.1	-	! -	1.2		_	-
Thallium	7.0	70	-	-	-	<u></u>	-	-	-
Zinc (TTLC)	250	2500	1920.0	41.7	34.5	6980.0	40.0	32.7	188.0
Zinc (STLC)	250	NA	na	na	na	59.9	na	na	na
pH			8.1	8.1	8.0	8.3	8.2	8.0	8.6

All metals results expressed in (ppm).

Sampling Dates: October 28 and October 31, 1994.

TTLC = California Title 22 Total Threshold Limit Concentration

STLC = California Title 22 Soluble Threshold Limit Concentration

NA: Indicates guidance value is not applicable to this test.

54.1 Indicates a result that exceeded the applicable STLC level by more than 10 times.

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit. na: Indicates analysis was not performed.

H: Spike percent recovery was outside laboratory control limit due to interferences from relatively high concentration level of the analyte in the unspiked sample.

Inorganic Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

		Boring ID		B-5		PB-6		P	B-7
	S	ample Depth	4.5' - 5.5'	8.5' - 9.5'	1.0' - 2.0'	3.5' - 4.5'	8.5' - 9.5'	0.5' - 1.5'	3.5' - 4.5'
}		Sample ID	PB5.2	PB5.3	PB6.1	PB6.2	PB6.3	PB7.1	PB7.2
	STLC	10 X			ĺ			ļ	
Analyte		STLC	l		l			İ	
Antimony	15	150	_	-	-	-			-
Arsenic	5.0	50	5.5	4.9	4.6	1.9	3.2	4.5	2.5
Barium	100	1000	245.0	185.0	249.0	166.0	208.0	374.0	199.0
Cadmium	1.0	10	<u>=</u>				{ <u>=</u>		
Total Chromium (TTLC)	5.0	50	73.5	91.4	68.7	73.4	75.9	67.8	73.5
Total Chromium (STLC)	5.0) [na	0.20	na	na	na	na	na
Total Chromium (TCLP)		\	na] -	na	na	na	na	na
Copper	25	250	22.6	22.4	70.9	23.6	19.2	46.0	23.2
Lead (TTLC)	5.0	50	9.5	8.1	928.0	8.8	6.6	278.0	11.6
Lead (STLC)	5.0	NA (na	na	6.7	na	na na	11.4	na
Mercury	0.2	2	-	-	0.13	0.11	0.13	0.13	-
Selenium	1.0	10	-	-	-	-	-		-
Silver	5	50	-	-	-	-	-	-	-
Thallium	7.0	70	-] -	-	-	-		<u>.</u>
Zinc	250	2500	636.0	46.5	537.0	40.3	29.3	133.0	42.8
рΉ		[7.7	8.0	8.4	7.6	7.9	7.9	8.6

All metals results expressed in (ppm).

Sampling Dates: October 28 and October 31, 1994.

TTLC = California Title 22 Total Threshold Limit Concentration

STLC = California Title 22 Soluble Threshold Limit Concentration

NA: Indicates guidance value is not applicable to this test.

54.1 Indicates a result that exceeded the applicable STLC level by more than 10 times.

^{- :} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit. na: Indicates analysis was not performed.

H: Spike percent recovery was outside laboratory control limit due to interferences from relatively high concentration level of the analyte in the unspiked sample.

Inorganic Analytical Data

Former American National Can Company Facility Oakland, California

Drum Storage Area - Confirmation Soil Sampling

	<u> </u>	Boring ID	PB - 7	1	PB-8		}	PB-9	
		Sample Depth	8.5' - 9.5'	2.0' - 3.0'	4.0' - 5.0'	8.5' - 9.5'	0.5' - 1.5'	4.0' - 5.0'	8.5' - 9.5'
		Sample ID	PB7.3	PB8.1	PB8.2	PB8.3	PB9.1	PB9.2	PB9.3
(STLC	10 X		}					
Analyte		STLC		<u></u>			L		
Antimony	15	150]	-	}	-	-	1.4
Arsenic	5.0	50	5.4	4.1	3.1	2.5	4.0	3.6	5.5
Barium	100	1000	141.0	234.0	221.0	156.0	229.0	135.0	169.0
Cadmium	1.0	10			(<u> </u>		·	-
Total Chromium (TTLC)	5.0	50	66.0	80.5	91.6	64.0	71.9	63.9	204.0
Total Chromium (STLC)	5.0	1 [na	na	0.20	na	na	na	0.076
Total Chromium (TCLP)	, ==		na	na na	} -) na	na	na	-
Copper	25	250	23.9	23.9	24.0	17.0	23.6	18.6	27.6
Lead	5.0	50	8.2	17.0	18.6	5.8	9.4	6.8	7.5
Mercury	0.2	2	-	-	-	0.26	-	-	
Selenium	1.0	10	-	-		-	} -	-	-
Silver	5	50	-	-	-	l -	-	_	-
Thallium	7.0	70	-] -	-	-	-	-	-
Zinc	250	2500	55.4	37.8	39.9	34.7	44.6	38.1	43.8
pН		{	8.4	7.9	8.1	8.1	8.0	8.8	8.4

All metals results expressed in (ppm). Sampling Dates: October

Sampling Dates: October 28 and October 31, 1994.

TTLC = California Title 22 Total Threshold Limit Concentration STLC = California Title 22 Soluble Threshold Limit Concentration

- : Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit. na: Indicates analysis was not performed.

NA: Indicates guidance value is not applicable to this test.

54.1 Indicates a result that exceeded the applicable STLC level by more than 10 times.

H: Spike percent recovery was outside laboratory control limit due to interferences from relatively high concentration level of the analyte in the unspiked sample.

Volatile Organic Analytical Data

Former American National Can Company Facility Oakland, California

RCRA Storage Facilities - Background Soil Sampling

Soil Boring II	0	PB-1		<u> </u>	PB-2	
Sample Depti		5.0' - 6.0'	10.0' -11.0'	0.5' - 1.5'	6.5' - 7.5'	8.5' - 9.5'
Compound Sample II		PB1.2	PB1.3	PB2.1	PB2.2	PB2.3
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	•	_ '	-	-
Bromomethane	_	_	-		-	_
Chloroethane	_	-	_	- :	-	-
Trichlorofluoromethane	-	_		-	_	-
1, 1-Dichloroethene	-	-	-		-	-
Trichlorotrifluoroethane	-	-	-	-	-	-
Acetone	110 B	55 B	120 B	170 B	78 B	39 B
Carbon Disulfide	-	-	-	-	_	-
Methylene Chloride	7 B	11 B	10 B	10 B	15 B	10 B
Trans-1,2-Dichloroethene	-	-	-	-	-	} -
1,2-Dichloroethane	-	-	-	i -	-	-
Cis-1,2-Dichloroethene	-	-	-	-	-	-
2-Butanone	_	-	-	-		-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	1 -	} -) -	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
Vinyl Acetate	-	į -		-	-	-
Benzene	-	-	-	-	-	-
1,2-Dichloroethane	1 -] -	-	-] -	} -
Trichloroethene	-	-	-	-	-	-
I, 2-Dichloropropane		-	-	ļ -	-	-
Bromodichloromethane	-	-	-	-	-	-
Cis-1, 3-Dichloropropene	-	-	-	-	-	-
4-Methyl-2-Pentanone	<u> </u>] -	-	-	-	-
Toluene	-	-	_	-	-	8
Trans-1, 3-Dichloropropene		_	_	_	_	_
1,1, 2-Trichloroethane	_	_		_	<u> </u>	
Tetrachloroethene		<u> </u>	_	_	<u> </u>	_
2-Hexanone	_]		_	
Dibromochloromethane			1			}
Chlorobenzene	_	}	_	_	-	} _
Ethylbenzene		1			_	
Xylene(total)	1		-	-	[_
Styrene	1 _		_	_	_]
Bromoform		- -		_	_	} _
11,1,2,2-Tetrachloroethane]	1		}
1,3-Dichlorobenzene	1	[_	[
1,4-Dichlorobenzene	1 _	1	_	_	_	_
1.2-Dichlorobenzene	1	1]	_	
T.I.C. (Total)	_	_	_	_	_	}
1.1.C. (10tal)		<u> </u>				<u> </u>

All results expressed in ug/kg (ppb).

Sampling Dates: October 28 and 29, 1994

1

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.

B: Compound was detected in the associated method blank.

Table 9

Inorganic Analytical Data

Former American National Can Company Facility Oakland, California

RCRA Storage Facilities - Background Soil Sampling

	Boring ID			PB-1			PB-2		
Į		S	ample Depth	0.5' - 1.5'	5.0' - 6.0'	10.0' -11.0'	0.5' - 1.5'	6.5' - 7.5'	8.5' - 9.5'
			Sample ID	PB1.1	PB1.2	PB1.3	PB2.1	PB2.2	PB2.3
	Mean Nat.	STLC	10 X			ı	İ		
Analyte	Conc. **	Standard	STLC Std.						
Antimony	0.67	15	150	-	-	-	-	} -	-
Arsenic	7.2	5.0	50	3.5	6.3	2.6	3.6	4.1	5.3
Barium	580	100	1000	142.0	366.0	187.0	77.5	198.0	128.0
Cadmium	0.06	1.0	10	**) -	- 1	-	[<u>-</u> _
Chromium (TTLC)	54	5.0	50	43.3	36.0	41.8	49.7	51.8	65.7
Chromium (STLC)	NA	5.0	NA	na	na na	na	na	na	na
Copper	25	25	250	20.1	16.9	13.5	11.8	20.7	23.3
Lead	19	5.0	50	9.7	8.2	5.7	5.6	10.4	12.3
Mercury	0.089	0.2	2	_	-		-	-	} -
Selenium	0.39	1.0	10	_	-	-	_	-	ļ -
Silver	NA	5	50	_] -	-	-		
Thallium	NA	7.0	70	_] -	-	-	-	l -
Zinc	60	250	2500	38.7	37.9	35.9	19.4	32.4	45.8
рН	ļ ļ	ı		8.8	8.3	8.2	9.8	7.4	8.0

All metals results expressed in ug/kg (ppm).

Sampling Dates: October 28 and October 31, 1994

54.1 Indicates a result that exceeded the applicable STLC level by more than 10 times.

H: Spike percent recovery was outside laboratory control limit due to interferences from relatively high concentration level at the analyte in the unspiked sample.

^{**} Arithmetic Mean natural concentration of analyte in soil: From "Concentrations of Selected Elements in Soils of the Conterminous United States". USGS professional paper, Shacklette and Boerngen, 1985.

^{-:} Indicates that the compound was analyzed for but not detected at or above the practical quantitative limit.