

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

**RCRA Corrective Action
Environmental Indicator (EI) RCRIS Code (CA725)**

Current Human Exposures Under Control

Facility Name: Pechiney Plastic Packaging, Inc.
(Formerly American National Can Company)
Facility Address: 1500 East Aurora Avenue, Des Moines, Iowa
Facility EPA ID #: IAD001818327

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

 X If yes - check here and continue with #2 below.

 If no - re-evaluate existing data, or

 If data are not available skip to #6 and enter "IN" (more information needed) status code.

The Pechiney Plastic Packaging, Inc. (PPPI), property is located at 1500 East Aurora Avenue, Des Moines, Iowa (see Figure 1-1, Attachment 1). The PPPI property was a dairy farm prior to its 1946 purchase by Luthe Hardware Company (Luthe), who constructed a hardware storage warehouse on the property. From 1957 to 1964, Luthe leased the facility to Ford Motor Company for use as a parts warehouse and regional sales office. In 1964, American Can Company leased the property from Luthe for use as a flexible packaging facility, with manufacturing commencing in mid-1965. Between 1967 and 1989, expansions to the operations at the facility resulted in expansions to the original building. In 1987, American Can Company merged with National Can Company to form American National Can Company (ANCC). ANCC purchased the facility from Luthe in 1988. Between 1995 and 2000, ANCC became PPPI.

In 1991, U.S. Environmental Protection Agency (EPA) Region VII issued an Administrative Order on Consent to ANCC as part of a multimedia effort to address lead contamination at the facility. The 1992 Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan for ANCC identified 25 potential SWMUs at the facility. These former or current SWMUs were addressed under three geographic areas: Northeast, Southwest and Building Interior. The following list of SWMUs is derived from the RFI report (Montgomery Watson Harza [MWH] 1995, Revised July 2002). (Note: the RFI indicates there are 29 SWMUs, but only lists 25, suggesting that the count of 29 was incorrect or is a typographical error in the RFI.)

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)

Page 2

Northeast Area

Five SWMUs have been identified in the approximately 300 by 300 foot area located to the northeast of the main plant building. These SWMUs are described below.

Printing Ink Residue Area. Initial sampling of soils containing residues of printing ink found elevated concentrations of lead, chromium, and volatile organic compounds (VOC). Contaminated soils were excavated in 1989, backfilled, and overlain by a rail spur. Two soil borings installed in this area during the RFI contained metal concentrations consistent with background soil levels. No VOCs or semivolatile organic compounds (SVOC) were detected. This SWMU is immediately downgradient of the former burn pit. Groundwater contamination in the vicinity of the printing ink residue area is attributable to the former burn pit and is discussed below.

Former Burn Pit Area. RFI soil samples from this area exceeded the EPA Region 9 Industrial Soil Preliminary Remediation Goals (PRG) for lead (750 milligrams per kilogram [mg/kg]), chromium (450 mg/kg), and n-nitrosodi-n-propylamine (NDPA) (0.35 mg/kg). These soils, measuring about 85 by 90 feet, were excavated to a depth of about 9 feet in Fall 1999. Post-excavation sampling indicated that NDPA was not detected. The maximum concentrations of lead and chromium detected in post-excavation sampling were 484 and 113 mg/kg, respectively, below the EPA Region 9 PRG (Montgomery Watson 1999). RFI groundwater samples from the former burn pit area revealed arsenic and benzene contamination plumes in the underlying aquifer. Groundwater contaminant plumes detected during the August 1999 sampling event are provided in Attachment 1. Arsenic was detected at a maximum concentrations of 391 micrograms per liter ($\mu\text{g/L}$) in Monitoring Well MW-11A, and benzene was detected at a maximum of 41.2 $\mu\text{g/L}$ in MW-3. Both of these wells are downgradient from the former burn pit and are adjacent to the former printing ink residue excavation area. VOCs, including acetone, ethylbenzene, and toluene, were detected at concentrations exceeding MCLs in groundwater samples collected in this area between 1986 and 1993. In the 1999 sampling event, these VOCs were not detected.

Former Container Storage Area. Soil sampling conducted in 1984 and 1986 identified elevated lead and chromium, with low levels of VOCs. This SWMU underwent closure in 1989 and 1990, and about 14 inches of soil containing elevated concentrations of lead and chromium were removed. Four soil borings were conducted during the RFI; however, two were placed to the north of the SWMU and appeared to reflect the southern limits of the burn pit area, rather than this SWMU. The two borings within the SWMU area had metals concentrations consistent with background levels. No VOCs or SVOCs were detected. No additional investigation of this area was performed during the RFI activities.

Former Buried Drum Area. Two buried 55-gallon drums were unearthed during construction activities in 1989. The drums were encountered at a depth of about 3 feet below ground surface (bgs), on top of a buried concrete slab. The drums, containing a viscous liquid believed to be press oil, and surrounding soil were found to have concentrations of toluene. Toluene was detected at 32 micrograms per kilogram ($\mu\text{g/kg}$) from the buried drum material and at 81 $\mu\text{g/kg}$ in the soil. Three soil borings were installed during RFI activities in 1993, and samples were collected for VOC analyses from two of the borings, based on field observations. Toluene was detected in the soils at concentrations of 8,800 and 9,000 $\mu\text{g/kg}$ at depths of 3 to 4 feet bgs, corresponding to the depth where the drums were found. This

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)

Page 3

concentration was less than the 12,100 µg/kg clean closure standard established elsewhere at the PPPI facility (MWH 2002) and less than the EPA Region 9 PRG of 520 mg/kg for toluene. Other VOCs (acetone, xylenes, and methyl ethyl ketone) were detected at concentrations up to 303 µg/kg. The highest concentrations of lead and chromium detected were 715 and 140 mg/kg, respectively, at a depth of 2 to 3 bgs. The 1999 groundwater plume map shows arsenic at 43 µg/L in the MW-9A, located downgradient from the former buried drum area. This contamination is considered to be associated with the former burn pit located crossgradient to this monitoring well.

Former Bulk Tank Area - This former 10,000-gallon bulk tank was used to store solvent and ink sludge. It was removed in 1981, underwent closure in 1984, and currently is paved with asphalt and used for parking. Two soil samples collected in 1986 contained concentrations of extractable lead and chromium at 0.07 and 0.54 mg/kg, respectively. No VOCs were detected. No additional investigation activities occurred at this site during the RFI. VOCs have not been detected in the groundwater from this area. Metals concentrations detected above MCLs in 1999 in well MW-2B are attributed to turbidity resulting from well damage.

Southwest Area

Previous investigations have not detected significant soil contamination in the southwest area; however, an arsenic plume is present in groundwater, possibly resulting from a combination of leaks and spills from the underground piping, interior floor drains, or material handling. Historically, the maximum concentration of arsenic detected in groundwater beneath the southwest area was 642 µg/L (MW-14A in June 1994). Groundwater samples collected during the 1999 RFI revealed arsenic concentrations up to 548 µg/L, also in MW-14A. Historically, barium was detected at a maximum concentration of 4,740 (MW-14A in December 1993) and lead was maximum of 40 µg/L (MW-1A in August 1989). Groundwater samples collected during the 1999 RFI revealed barium concentrations up to 2,120 µg/L and lead concentrations up to 23 µg/L in MW-21A. The barium and lead concentrations were slightly above their respective MCLs of 2,000 µg/L and 15 µg/L.

Former Concrete Sump Drain Accumulation Tank. This was a 300-gallon concrete underground tank connected by piping to floor drains inside of the plant and designed to collect spills and wash water. This tank was removed and the area backfilled in 1990 (Montgomery 1992).

Former Underground Storage Tank (UST) Area # 2. This area held four 5,000-gallon and two 1,500-gallon USTs containing toluene, isopropyl alcohol, ethyl alcohol, propyl acetate, and hexane-based solvents. These tanks were removed in 1990.

Former Fuel Oil Tank # 1. A 20,000-gallon fuel tank for back-up generators was installed in 1976 and emptied prior to the RFI.

Solvent Pipeline Spill. On March 12, 1990, a spill of about 20 to 30 gallons occurred, resulting from a ruptured pipe. The liquid spilled was a mixture of about 90 percent n-propyl alcohol and 10 percent n-propyl acetate. During the RFI, one soil boring was placed in this area between the building and

**Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)**

Page 4

former UST area #2. Soil samples were analyzed for alcohol and acetate, but these compounds were not detected.

Building Interior

The following is a list of SWMUs present within the main plant building.

1. Solvent Still
2. Parts Washer #1
3. Parts Washer #2
4. Parts Washer #3
5. Parts Washer #4
6. Press Area
7. EGAN Laminator
8. FMC Adhesive Laminator
9. Waste Oil and Press Sludge Accumulation Area
10. Waste Ink Accumulation Area
11. Hazardous Waste Accumulation Area
12. Underground Piping
13. Portable Tote Bin
14. Waste Solvent/Inc Accumulation Tank
15. Lubricating Oil, Heat Transfer Fluid and Glycol Mixtures Accumulation Area
16. Floor Drains/Storm Sewers

RFI activities targeted the former portable tote bin, the underground piping, and the floor drains/storm sewers because of their potential to release contaminants to the subsurface. Soil borings were placed at each of these SWMUs during RFI activities in 1993 and 1994. Soil samples contained metal concentrations consistent with background levels. Concentrations of VOCs were detected in soils above a depth of 3 feet, at a maximum of 130 µg/kg (acetone). Visual inspection of other listed SWMUs did not indicate the presence of complete contaminant pathways.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of “Current Human Exposures Under Control” EI

A positive “Current Human Exposures Under Control” EI determination (“YE” status code) indicates that there are no “unacceptable” human exposures to “contamination” (i.e., contaminants in

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)

Page 5

concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all “contamination” subject to RCRA corrective action at or from the identified facility [i.e., site-wide]).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The “Current Human Exposures Under Control” EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program’s overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

**Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)**

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be “contaminated”¹ above appropriately protective risk-based “levels” (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria [e.g., Maximum Contaminant Levels (MCLs), the maximum permissible level of a contaminant in water delivered to any user of a public water system under the Safe Drinking Water Act] from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

| | <u>Yes</u> | <u>No</u> | <u>?</u> | <u>Rationale / Key Contaminants</u> |
|-----------------------------|------------|-----------|----------|---|
| Groundwater | <u>X</u> | <u>—</u> | <u>—</u> | <u>Arsenic, Barium, and Benzene above MCL</u> |
| Air (indoors) ² | <u>—</u> | <u>X</u> | <u>—</u> | <u>—</u> |
| Surface Soil (e.g., <2 ft) | <u>—</u> | <u>X</u> | <u>—</u> | <u>—</u> |
| Surface Water | <u>—</u> | <u>X</u> | <u>—</u> | <u>Please See Below</u> |
| Sediment | <u>—</u> | <u>X</u> | <u>—</u> | <u>—</u> |
| Subsurf. Soil (e.g., >2 ft) | <u>—</u> | <u>X</u> | <u>—</u> | <u>—</u> |
| Air (outdoors) | <u>—</u> | <u>X</u> | <u>—</u> | <u>—</u> |

 If no (for all media) - skip to #6, and enter “YE,” status code after providing or citing appropriate “levels,” and referencing sufficient supporting documentation demonstrating that these “levels” are not exceeded.

 X If yes (for any media) - continue after identifying key contaminants in each “contaminated” medium, citing appropriate “levels” (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

 If unknown (for any media) - skip to #6 and enter “IN” status code.

Rationale and Reference(s):

Groundwater

Recent (August 1999) groundwater data indicates that two groundwater plumes are present at PPPI (see Attachment 1, Figures 6A and 6B). An arsenic plume is present at the southwestern edge of the main plant building, near the former UST area. Hydraulic gradient is generally southward at this location, and the plume apparently originates in the area of MW-14A, which produced a groundwater sample with an arsenic concentration of 548 µg/L in August 1999. Another arsenic plume is present northeast of the building, where August 1999 concentrations exceeded 300 µg/L in MW-3 and MW-11A. This plume apparently originates from the Former Burn Pit, although it also encompasses the area of the Former Printing Ink Residue Area. Barium and lead have occasionally exceeded their respective MCLs in both the northeast and southwest areas. In August 1999, MW-2B, located east of the plant, had concentrations of arsenic (879 µg/L), barium (11,200 µg/L), lead (1,090 µg/L), and nickel (2,290 µg/L) that exceeded their respective MCLs. Groundwater in this well was reported to be extremely turbid. In October 2001, this well was replaced because of damage resulting from a combination of frost heave and truck traffic.

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)

Page 7

The replacement well, MW-2C, was placed about 5 feet from the original location and screened over the same interval. Sampling of MW-2C in November 2001 indicated that all parameters were below detection limits (barium was not analyzed). It appears likely that the concentrations detected in MW-2B in August 1999 are not representative of actual groundwater conditions but reflect the silt fraction in the unfiltered sample, with the high turbidity caused by undetected damage to the well casing. Future groundwater monitoring at the facility will help determine if there is a release of barium at the site. The arsenic, lead and benzene contamination is found restricted to the two areas (southwest and northeast) mentioned above and is not migrating either horizontally or vertically from those areas.

The former burn pit is considered to be the primary source for groundwater contamination at the northeast area. A combination of minor spills and leaks associated with underground piping and drains is considered to be the likely source for groundwater contamination at the southwest area. Table 1 presents the maximum contaminant concentrations detected at the site. This area will be monitored on a semi-annual basis and will be included in the final remedy selected for the facility.

Soils

Numerous investigations have been performed at PPPI to characterize the soils around SWMUs. Surface and subsurface soils were found to be contaminated above industrial soil PRGs for lead, chromium, and the SVOC NDPA at the former burn pit. This former burn pit is considered to be the primary source for soil (and groundwater) impacts in the northeast area. Soils also exceeded industrial PRGs for lead and chromium at the former container storage area, and toluene-contaminated soil was found at the former buried drum location. Soils above action levels have since been excavated at all three locations, and no remaining locations of soils in exceedence of industrial soil PRGs have been identified at this site. No significant soil impacts have been identified from investigation activities at the southwest area of the facility.

Surface Water and Sediments

One surface water and one sediment sample were collected from a low area north of the railroad tracks. Metals concentrations were consistent with background concentrations in the sediment sample, and VOCs and SVOCs were not detected. VOCs, SVOCs, and metals concentrations were all below detection levels in the surface water sample.

**Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)**

Page 8

Table 1 - Summary of Groundwater Detections As Compared to EPA Maximum Contaminant Levels or Region 9 Tap Water Preliminary Remediation Goals

| Groundwater | | | | | |
|--------------|--|---------------------------------|------------------------------------|--------------------------------|----------------------------------|
| Compound | EPA MCL or *Region 9 Tap Water PRG | Number of MCL Exceedences | Maximum Concentration (µg/L) | 1999-2001 Maximum (µg/L) | 1999-2001 Maximum Location |
| Acetone | 610* | 12 | 72,000 | 44.4 | MW-10B |
| Benzene | 5 | 14 | 250 | 41.2 | MW-3A |
| 2-Butanone | 1,900* | 7 | 16,000 | <5 | |
| Chloroethane | 4.6* | 5 | 445 | <1 | |
| 1,3-DCB | 600 | | 1.1 | <1 | |
| 1,4-DCB | 75 | | 1.3 | <1 | |
| 1,1-DCA | 810* | 1 | 850 | 8.7 | MW-21A |
| 1,1-DCE | 7 | 4 | 51 | 3.2 | MW-21A Dup |
| Ethylbenzene | 700 | 2 | 790 | 314 | MW-6A |
| MIBK | 160* | 5 | 3,400 | <5 | |
| Toluene | 1,000 | 9 | 26,000 | 762 | MW-6A |
| 1,1,1-TCA | 200 | 4 | 810 | <1 | |
| VC | 2 | | <1,000 | <1 | |
| Xylenes | 10,000 | | 7,240 | 5,160 | MW-3A |
| Arsenic | 10 (Proposed) | 54 (≥10) | 879 | 879 | MW-2B |
| Barium | 2,000 | 5 | 11,200 | 11,200 | MW-2B |
| Chromium | 100 | | 17 | 17 | MW-8A |
| Lead | 15 | 32 | 6,800 | 1,090 | MW-2B |
| Nickel | 500* | 1 | 2,290 | 2,290 | MW-2B |

Notes

DCB Dichlorobenzene
DCA Dichloroethane
DCE Dichloroethene
Dup Duplicate sample
EPA U.S. Environmental Protection Agency
MCL Maximum contaminant level
MIBK 4-Methyl-2-pentanone
µg/L Micrograms per liter

MW Monitoring well
PRG Preliminary remediation goals
TCA Trichloroethane
VC Vinyl chloride
< Less than
≥ Greater than or equal to
* Value is Region 9 tap water PRG

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)

Page 9

Air

Air sampling has not been reported by the facility. Groundwater under the building only has concentrations of arsenic and barium concentrations that exceed MCLs. These compounds are metals and do not pose a volatilization threat to humans. A benzene plume is present to the northeast of the building at a depth of about 7 to 9 feet bgs and should be evaluated as a potential air contaminant. Although this plume is not located in or under a building, the Johnson-Ettinger model was used to model the approximate impact of volatile contaminants on indoor air quality to provide a scenario for comparison to outdoor conditions. The model was calculated using the maximum benzene concentration detected in groundwater (250 µg/L in MW-6A, detected in May 1987). Results of the Johnson-Ettinger model indicate that were a building present above the plume, the indoor air would not pose a hazard to workers at PPPI. The modeled target risk for indoor air was 2.4×10^{-7} for benzene, which falls below the acceptable cancer risk range of 10^{-4} and 10^{-6} levels. Because of outdoor air dispersion and the absence of a confined space, the target risk for outdoor air also would fall below this acceptable risk range. Because the result derived from the historical maximum benzene concentration was below the acceptable risk range, the risk level based on the lower recent maximum concentration of 41.2 µg/L in MW-3A also would fall below this acceptable risk range.

Footnotes:

¹ “Contamination” and “contaminated” describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based “levels” (for the media, that identify risks within the acceptable risk range).

² Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)
Page 10

3. Are there **complete pathways** between “contamination” and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

| “Contaminated” Media | Potential Human Receptors (Under Current Conditions) | | | | | | |
|-------------------------------|---|---------|----------|--------------|-------------|------------|-------------------|
| | Residents | Workers | Day-Care | Construction | Trespassers | Recreation | Food ³ |
| Groundwater | No | No | No | No | No | No | No |
| Air (indoors) | — | — | — | — | — | — | — |
| Soil (surface, e.g., <2 ft) | — | — | — | — | — | — | — |
| Surface Water | — | — | — | — | — | — | — |
| Sediment | — | — | — | — | — | — | — |
| Soil (subsurface e.g., >2 ft) | — | — | — | — | — | — | — |
| Air (outdoors) | — | — | — | — | — | — | — |

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors’ spaces for Media which are not “contaminated”) as identified in #2 above.
2. Enter “yes” or “no” for potential “completeness” under each “Contaminated” Media – Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential “Contaminated” Media - Human Receptor combinations (Pathways) do not have check spaces (“___”). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

- X If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter “YE” status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).
- ___ If yes (pathways are complete for any “Contaminated” Media - Human Receptor combination) - continue after providing supporting explanation.
- ___ If unknown (for any “Contaminated” Media - Human Receptor combination) - skip to #6 and enter “IN” status code

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)

Page 11

Rationale and Reference(s):

The RFI report indicates that one permitted domestic water supply well is located within 2 miles of the site. This well is located near the Des Moines River, about 2 miles to the west-northwest of PPPI and is likely to be screened in shallow alluvial deposits of the river. Two water supply wells have been drilled at PPPI (the first well was abandoned when the second was installed) to provide cooling water. These wells were screened in the sand and gravel deposits of the Beaver Channel. The Beaver Channel was encountered at a depth of 53 feet bgs at PPPI and underlies the silty clay to loam in which the monitoring wells are completed. Six permitted production wells reportedly are located at the Bridgestone/Firestone facility, about 1.5 miles to the west of PPPI. The RFI report indicates that these wells are no longer in use because of elevated iron concentrations.

The facility and adjoining properties are light industrial and commercial, and water is supplied by a public water system; therefore, residential, daycare, and recreational pathways are not considered to be viable exposure pathways. Because the facility is industrial and dominantly covered by building and pavement, the food pathway was not considered to be a viable exposure pathway. Construction workers are not likely to be exposed to contaminated groundwater. The depth of groundwater contamination in shallow monitoring wells (either not designated or designated as "A") is about 7 to 9 feet bgs, below the depth of most utilities. Trespassers are not likely to be exposed to contaminated groundwater, because groundwater wells are protected by locked, steel protective casings.

³ Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)

Page 12

4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**⁴ (i.e., potentially “unacceptable” because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable “levels” (used to identify the “contamination”); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable “levels”) could result in greater than acceptable risks)?

- X If no (exposures can not be reasonably expected to be significant (i.e., potentially “unacceptable”) for any complete exposure pathway) - skip to #6 and enter “YE” status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”
- _____ If yes (exposures could be reasonably expected to be “significant” (i.e., potentially “unacceptable”) for any complete exposure pathway) - continue after providing a description (of each potentially “unacceptable” exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”
- _____ If unknown (for any complete pathway) - skip to #6 and enter “IN” status code.

Rationale and Reference(s):

There are no complete exposure pathways. The on-site cooling water well at the facility is no longer in use due to elevated iron concentrations. (MWH 2002). Additionally, workers are required to comply with health and safety practices that limit their exposures to contaminants potentially present in groundwater sampled from monitoring wells. (MWH 2002). For these reasons, the Worker to Groundwater pathway cannot reasonably be expected to be complete.

⁴ If there is any question on whether the identified exposures are “significant” (i.e., potentially “unacceptable”) consult a human health Risk Assessment specialist with appropriate education, training and experience.

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)

Page 13

5. Can the “significant” **exposures** (identified in #4) be shown to be within **acceptable** limits?

_____ If yes (all “significant” exposures have been shown to be within acceptable limits) - continue and enter “YE” after summarizing and referencing documentation justifying why all “significant” exposures to “contamination” are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

_____ If no (there are current exposures that can be reasonably expected to be “unacceptable”)- continue and enter “NO” status code after providing a description of each potentially “unacceptable” exposure.

_____ If unknown (for any potentially “unacceptable” exposure) - continue and enter “IN” status code

Rationale and Reference(s):

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)
Page 14

6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

- YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the Pechiney Plastic Packaging, Inc. formerly American National Can Company facility, EPA ID # IAD001818327, located at 1500 East Aurora Avenue, Des Moines, Iowa under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
- NO - "Current Human Exposures" are NOT "Under Control."
- IN - More information is needed to make a determination.

**Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)**

Page 15

Completed by _____ Original signed by _____ Date 09/04/02

(signature)

Gayle Hubert
Project Manager, RCRA Corrective Action & Permits Branch
EPA Region 7

Supervisor _____ Original signed by _____ Date 9/5/02 _____

(signature)
John Smith
Branch Chief, RCRA Corrective Action & Permits Branch
EPA Region 7

Locations where References may be found:

EPA Region 7
RCRA Records Center
901 North 5th Street
Kansas City, Kansas 66101

Contact telephone and e-mail numbers:

Gayle Hubert
(913) 551-7439
hubert.gayle@epa.gov

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS Code (CA725)
Page 16

REFERENCES

- James M. Montgomery. 1992. "Description of Current Conditions, American National Can Company [ANCC], Des Moines, Iowa Facility." November.
- Montgomery Watson. 1999. "Vadose Zone Soil Remediation at the Former Burn Pit Area, Pechiney Plastic Packaging, Inc., Des Moines, Iowa." December.
- Montgomery Watson Harza. 2002. "Resource Conservation and Recovery Act Facility Investigation, ANCC, Des Moines, Iowa Facility." July.