

**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:** Ball Aerosol and Specialty Container, Inc.  
**Facility Address:** 3028 Birch Drive, Weirton, WV 26062  
**Facility EPA ID #:** WVD 041 517 830

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?

- 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.

**BACKGROUND**

The Ball facility is located at 3028 Birch Drive, Weirton, West Virginia. The Ball facility is located in the Half Moon Industrial Park on the southwest side of Weirton. The facility is located on a small peninsula with the Ohio River to the north, west, and south. A lightly wooded area is located directly to the east, with residential neighborhoods beyond that (approximately 0.5 mile away from the facility). The site is located on the north side of Birch Drive; Interstate 22 is located to the south (approximately 0.5 mile) of the site. Parts of the Half Moon Industrial Park contain facilities operated by Arcelor Mittal and Impress. Ball leases the buildings and property from Arcelor Mittal.

The site was developed in 1960 for use by Continental Can Incorporated. Continental Can changed names in 1987 to US Can Company, and then was purchased by the Ball Corporation in 2006. Throughout these name changes, the facility has conducted the same or similar process, which is the production of metal products used in aerosol cans.

A staff of 162 employees operates the facility 24 hours per day, 7 days per week. The facility operates five coating lines, six color lithographic printing lines, and three metal shearing lines. The finished product is shipped to another Ball facility, where the final cans are assembled.

Several types of wastes have historically been generated on the site. Solvents such as xylene, methyl ethyl ketone, and methyl isobutyl ketone have been used to clean the presses between runs. These wastes, including used rags contaminated with solvent, are stored temporarily in totes (and cans with lids for the rags). The solvent is removed by Resource One of Cincinnati, OH and used as a product to clean rail cars. The rags are laundered by Coyne Textile of Pittsburgh, PA.

The facility operated primarily as a Large Quantity Generator (LQG) of hazardous waste before 2006. In 2006, the facility changed its status to a Small Quantity Generator (SQG), although it was an episodic LQG for the month of April 2008. In addition, the facility mistakenly submitted Treatment Storage and Disposal Facility (TSDF) documentation, but has never operated as one.

### **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 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).

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2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be “contaminated”<sup>1</sup> above appropriately protective risk-based “levels” (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) 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		X		No groundwater monitoring has been performed at the site. Therefore the quality of and depth to groundwater is not known. All waste materials generation/storage is performed inside the fully enclosed building or on paved surfaces. The site is primarily paved, which prevents spills from reaching groundwater. No evidence of releases was found during the October 2009 Site Visit or in files reviewed.
Air (indoors) <sup>2</sup>		X		There are no significant activities indoors which would indicate indoor air contamination.
Surface Soil (e.g., <2 ft)		X		The closure of SMWU 2 (former USTs) was performed. After the closure, soil sampling was performed, and both sampling results and visual inspection showed no signs of contamination from the tanks. No evidence of releases was found in USEPA or WVDEP files. A majority of outdoor Ball working areas are paved. Hazardous waste activities are not performed on unpaved surfaces.
Surface Water		X		The nearest surface water is the Ohio River located approximately 1,500 feet from the main building. There are no drains that discharge to the river.
Sediment		X		The nearest surface water is the Ohio River located approximately 1,500 feet from the main building. There are no drains that discharge to the river.
Subsurf. Soil (e.g., >2 ft)		X		The closure of SMWU 2 (former USTs) was performed. After the closure, soil sampling was performed, and both sampling results and visual inspection showed no signs of contamination from the tanks. No evidence of releases was found in USEPA or WVDEP files. A majority of outdoor Ball working areas are paved. Hazardous waste activities are not performed on unpaved surfaces.
Air (outdoors)		X		While the facility operates under a Title V permit, there is no indication of exceedance or complaints from neighbors. There have been no recorded odor complaints from neighboring property owners.

- 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.
- 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, surface soil, and subsurface soil is not known or reasonably suspected to be contaminated above appropriately protective risk-based levels at the Ball facility. Similarly, there is no indication of releases that would have reached surface water or sediment in the vicinity of the site.

There is no indication of current air emissions that would negatively impact indoor and/or outdoor air quality. No recorded or documented releases of contaminants to the environment or odors at the Ball facility were identified in the documents reviewed.

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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**

Potential **Human Receptors** (Under Current Conditions)

<b><u>“Contaminated” Media</u></b>	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food <sup>3</sup>
Groundwater							
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.

- 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.

Rationale and Reference(s):

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

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4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**<sup>4</sup> (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)?

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):

<sup>4</sup> 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.

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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):

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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 (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 Ball Aerosol and Specialty Container, Inc. facility, EPA ID # WVD 041 517 830, located at 3028 Birch Drive, Weirton, WV 26062. Specifically, this determination indicates that the migration of "contaminated" groundwater is 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.

Completed by (signature) -s- Date 7/29/10  
(print) Denis Zielinski  
(title) Senior RPM

Supervisor (signature) -s- Date 8/2/10  
(print) Luis Pizarro  
(title) Associate Director  
EPA Region III

Locations where References may be found:

US EPA Region III  
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