

Revised  
July 30, 2004  
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**DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION**

July 2004

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

**Current Human Exposures Under Control**

**Facility Name:** Menasha Packaging Company – Yukon Plant  
**Facility Address:** Route 70, PO Box 418, Yukon (Sewickley Township), PA 15698  
**Facility EPA ID #:** PAD 004 330 999

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

**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 Controls" 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 Known Releases
Air (indoors) <sup>2</sup>	_____	X	_____	No Known Releases
Surface Soil (e.g., <2 ft)	_____	X	_____	No Known Releases
Surface Water	_____	X	_____	See Below
Sediment	_____	X	_____	No Known Releases
Subsurface Soil (e.g., >2 ft)	_____	X	_____	See Below
Air (outdoors)	_____	X	_____	No Known Releases

- X \_\_\_\_\_ If no (for all media) – skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient support 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):

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**See following page for response to Question 2 (Rationale and Reference(s))**

<sup>1</sup> "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).

<sup>2</sup> 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.

## **Question #2 (Rational and Reference(s) – Current Human Exposures Under Control**

### **Response:**

Menasha is a corrugated box manufacturing facility. Only small quantities of hazardous waste are generated. Hazardous waste was never stored or treated in a manner that required a hazardous waste permit. There are no outstanding issues with any identified areas of concern or solid waste management units. Below, past impacts to environmental media are discussed:

#### Surface Water

On May 29, 2001, the facility notified PADEP that it had discovered that a sink in the facility was connected to a NPDES stormwater outfall and was inadvertently discharging wastewater to the outfall. The sink was removed from service until the plumbing could be rerouted. The facility investigated the extent of any environmental impacts. The sink plumbing was redirected to the wastewater treatment plant by June 11, 2001. According to the facility contact, the sink has been disconnected and removed.

A minor soapy residue was found at the outfall, but no other impacts or stressed vegetation were observed. Dye testing was performed on the other sink connections at the facility, and the other sinks were not found to be discharging to plant outfalls. (Correspondence from Menasha to PADEP, 5/29/01; Correspondence from Menasha to PADEP, 6/21/01)

The files reviewed and communication with the facility indicate that the unpermitted discharge has been corrected and that there were no significant impacts to surface water resulting from the former discharge.

#### Subsurface Soil (>2 ft)

Soil contamination was discovered during the removal of underground storage tanks (USTs). Two fuel oil USTs were removed in 1988. During excavation of Tank No. 1, evidence of product was encountered around the fuel lines, at a depth of about four feet. About ten cubic yards of visually contaminated soil were excavated and stockpiled. No evidence of fuel oil was observed in the soil excavated from around Tank No. 2. PADEP visited the site after the removal of Tank No. 1 and concurred with the removal of contaminated soil. The excavated soil was disposed of at a PADEP-approved landfill. Two samples of groundwater infiltrating the Tank No. 1 excavation were collected, as well as samples of the stockpiled contaminated soil, for disposal characterization purposes. Petroleum hydrocarbons were not detected in the groundwater samples. A sample of tap water from the plant was also analyzed for comparison purposes, and the result indicated a level slightly above the detection limit. The tanks were pumped out, cleaned, and removed for off-site disposal. The tank excavations were backfilled. A tank closure report was submitted to PADEP. (Internal PADEP Memorandum, 6/15/88; *Documentation of Removal of Underground Storage Tanks*, D'Appolonia, 8/30/88)

The files reviewed indicate that the soil contamination was remediated and there is no ongoing impact to soil resulting from the former USTs.

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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)

"Contaminated Media" 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):

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<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**" (i.e., potentially<sup>4</sup> "unacceptable" levels) 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 a "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 a "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 (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 Menasha Packaging Company, Yukon Plant facility, EPA ID 004 330 999, located at Route 70, PO Box 418, Yukon, PA 15698 under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

X

NO – "Current Human Exposures" are NOT "Under Control."

IN - More information is needed to make a determination.

Completed by:

Carl Spadaro



Date

July 26, 2004

Carl Spadaro

Facilities Engineer – Waste Management

PADEP - Southwest Regional Office

Locations where References may be found:

References have been appended to the Environmental Indicator Report and can also be found at PADEP's Pittsburgh office and USEPA's Region III office.

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**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.**

Facility Name: Menasha Packaging Company – Yukon Plant  
EPA ID #: 004 330 999  
Location: Route 70, PO Box 418, Yukon, PA

### CURRENT HUMAN EXPOSURES UNDER CONTROL (CA 725)

