#### **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:	Paxar Corporation			
Facility Address:	317 South Thomas Avenue, Sayre, Pennsylvania			
Facility EPA ID #:	PAD 080 879 588	_		

 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 togo 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 nonhuman (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 arrent 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).

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)?

	Yes	No	2	Rationale/Key Contaminants
Groundwater		Х		The facility has no history of releases to
				groundwater.
Air (indoors) <sup>2</sup>		Х		Paxar no longer conducts operations that
				required an air permit.
Surface Soil (e.g., <2 ft)		X		The facility has no history of releases.
Surface Water		X		There are no surface water bodies in the
				immediate vicinity of the facility.
Sediment		X	,	There are no surface water bodies in the
				immediate vicinity of the facility.
Subsurface Soil (e.g., >2 ft)		X	(es. 1794	The facility has no history of releases.
Air (outdoors)		X		Paxar no longer conducts operations that
M MA				required an air permit.

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):

Х

See next page for response to Rationale and Reference(s).

<sup>&</sup>lt;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>&</sup>lt;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.

# Response to Question 2, Current Human Exposures Under Control

#### Rationale and Reference(s):

The site does not contain any groundwater monitoring wells; therefore, no groundwater monitoring has taken place. According to PADEP and USEPA files, no releases to groundwater (or soil) appear to have occurred at this facility.

A sectional UST was formerly located on the southwestern side of the building/Area G. This storage tank was divided into three compartments and had a total capacity of 10,000 gallons. This UST contained methyl ethyl ketone (MEK), toluene, and isopropyl alcohol (IPA). In August 1994, the UST was removed (Brooks Petroleum Contracting Company, September 7, 1994). According to the *Underground Storage Tank Closure Report Form* completed at the time of removal and the samples collected, all soil appeared to be uncontaminated and was used as backfill. Soil samples collected at the time of removal showed low levels of MTBE present in the soil. Following removal, the area was capped.

Based on the lack of history of releases, and the fact that most of the site is paved and covered with a building it does not appear that soil or groundwater contamination exists.

The Paxar South Thomas Avenue facility had a history of VOC emissions exceeding PADER regulations dating back to the early 1980s. The sources of these emissions were the facility's two retrogravure printing presses and the "A and B fabric coating lines" (PADER, October 18, 1983). The facility attempted to mitigate VOC emissions through numerous operational changes but were not successful. In September 1995, Paxar informed PADEP that all ink manufacturing processes at the South Thomas Avenue facility ceased and were relocated to a new manufacturing facility in Rock Hill, South Carolina (Paxar, September 10, 1995). As a result, the retrogravure printing presses and the "A and B fabric coating lines" were no longer to be used in the facility's operations.

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)

3.

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

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):

in Se

<sup>&</sup>lt;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.

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 sitespecific 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):

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 Paxar Corporation facility, EPA ID # PAD 080 879 588, located at 317 South Thomas Avenue, Sayre, PA 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) Start Shart (print) Joseph Figured	Date	11/4/11
Supervisor:	(title) Permits Section (signature) (print) Paul Gotthold (title) Assoc. Director, PA Remed., LCD (EPA Region or State) EPA Region 3	Date	11-8-11

Locations where References may be found

All reference documents are appended to the Environmental Indicator Final Report, which can be found at the PADEP North Central Records Office (in Williamsport) or USEPA Region III Records Office (in Philadelphia).

Contact telephone and e-mail numbers:

(name) Joseph Figured

(phone #) (570) 327-3730

(e-mail) Jfigured@state.pa.us

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.

YE

Facility Name:Paxar CorporationEPA ID #:PAD 080 879 588Location:317 South Thomas Avenue, Sayre, PA



CURRENT HUMAN EXPOSURES UNDER CONTROL (CA 725)

P/Projects/EI-CME/0346 E048 - FINAL FORMS