

**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: **Proctor and Gamble**  
Facility Address: **3600 Elm Ave Portsmouth VA**  
Facility EPA ID #: **VAD003174810**

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 former Proctor and Gamble facility (P&G) is a 21-acre site that utilized an 11,000 square foot, multi-story facility to manufacture and package peanut butter beginning in 1931. In 1994 the 21-acre site was sold to Fred R. Langley of Knoxville, TN (Virginia Pilot Newspaper 12/2/94).

The site maintained a hazardous waste storage area from November 19, 1980 to June 30, 1993. The storage area accepted wastes from an on-site Quality Assurance Lab. No indications of other Hazardous Waste storage areas were identified by the file review or during two site visits. The hazardous waste management unit (HWMU) container storage area had a capacity of 550 gallons. This HWMU was 10' x 10' curbed concrete mat enclosed in a locked cyclone fence with maximum storage of ten 55-gallon drums. The HWMU was used to store spent lab solvents. The volume of waste generated per year was listed as 1,500 pounds per year. Apparently, the same HWMU container storage area was operated under both a large quantity generator (LQG) and a small quantity generator (SQG) status under 40 CFR § 262.34, until the P&G facility closed. P&G deactivated the entire facility on May 22, 1995.

The site is currently occupied by ARREFF Terminals Inc., with a number of shipping containers present on the site. ARREFF Terminals provides transloading / warehousing for the Virginia Port Authority. The container storage area mat and fence were moved as one unit by ARREFF from its original location on the west side of the building to the southwest corner of the site and is not currently used by the facility.

**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		
Air (indoors) <sup>2</sup>		X		
Surface Soil (e.g., <2 ft)		X		
Surface Water		X		
Sediment		X		
Subsurf. Soil (e.g., >2 ft)		X		
Air (outdoors)		X		

- 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):

As noted above, the P&G facility operated a hazardous waste management unit (HWMU) container storage area with a capacity of 550 gallons from November 19, 1980 to June 30, 1993. This HWMU container storage area was identified by P&G in a RCRA Part A Permit Application, dated 11/17/80, and a 5/30/86 SWMU response letter.

P&G correspondence, dated July 7, 1988, documented that the facility intended to close the HWMU and did not intend to seek an operating Permit for the HWMU. A Closure Plan was submitted by P&G, dated July 19, 1988. On August 18, 1988, the public notice was published for the Closure Plan. On October 6, 1988, the VDWM provided P&G with comments on the initially submitted Closure Plan. P&G submitted the revised Closure Plan, dated October 14, 1988. The VDWM approved the revised Closure Plan on October 27, 1988. The VDWM received the closure certification according to the Closure Plan on March 28, 1989, and requested the closure verification inspection by the VDWM. The Closure verification inspection by the VDWM staff occurred on June 2, 1989.

The HWMU container storage area operated under Interim Status from November 19, 1980 to March 28, 1989, the date the facility requested a clean closure verification site visit by the Virginia Department of Waste Management (VDWM), predecessor to the VDEQ. Interim Status was officially terminated by the VDWM on June 19, 1989. Apparently, the same HWMU container storage area was operated under both a large quantity generator (LQG) and a small quantity generator (SQG) status under 40 CFR § 262.34, until the P&G facility closed. P&G deactivated the entire facility on May 22, 1995.

The site is currently occupied by ARREFF Terminals Inc., with a number of shipping containers present on the site. ARREFF Terminals provides transloading / warehousing for the Virginia Port Authority. The container storage area mat and fence were moved as one unit by ARREFF from its original location on the west side of the building to the southwest corner of the site and is not currently used by the facility.

A RCRA Corrective Action Facility Assessment including file reviews, interviews with property owners, and two site visits evaluated a number of SWMUs and AOCs. No evidence of releases was obtained during the investigative process either

from historical documentation or from visual observations. Based on the information gathered it does not appear that the facility property has been contaminated by past manufacturing activities. No further action at this facility under the RCRA Corrective Action Program appears to be warranted at this time.

References

- 1) Final RCRA Site Report, Former Proctor and Gamble Site (Currently ARREFF Terminals), 3600 Elm Avenue, Portsmouth, Virginia, 23704, EPA ID No. VAD003174810, by U.S. Army Corps of Engineers, dated January 22, 2009

Footnotes:

<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.

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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>“Contaminated” Media</b>	<b>Residents</b>	<b>Workers</b>	<b>Day-Care</b>	<b>Construction</b>	<b>Trespassers</b>	<b>Recreation</b>	<b>Food<sup>3</sup></b>
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 **Former Proctor and Gamble** facility, EPA ID # **VAD003174810**, located at **3600 Elm Ave Portsmouth VA** 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 *Bill Wentworth* Date 5/4/09  
Bill Wentworth  
Remedial Project Manager

Supervisor *[Signature]* Date 5/6/09  
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