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: **White Mop Wringer Company**
Facility Address: **Riverside Drive, Fultonville, NY 12072**
Facility EPA ID #: **NYD00206214**

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 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).

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) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater	_X_	___	___	__**Benzene,Chloroform, Cyanide, Fluoride**
Air (indoors)[2]	___	_X_	___	
Surface Soil (e.g., <2 ft)	___	_X_	___	
Surface Water	___	_X_	___	
Sediment	___	_X_	___	
Subsurf. Soil (e.g., >2 ft) __		__	___	
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.

__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):___**FACILITY DESCRIPTION**

White Mop Wringer Company (WMW) is a manufacturing company which produces mop wringers, buckets, dust pans, mopping tanks and other receptacles. During manufacturing, products undergo steel cleaning, phosphatizing and zinc plating. On the southside of the facility, WMW had operated three surface impoundments. These surface impoundment were used to store treated wastewater from plating, tank cleaning, painting and steel phosphatizing operations prior to discharging it to a surface water drainage system under a NYSDEC SPDES permit. The surface impoundments were constructed and began operating in 1968. Discharge to the Surface Impoundments ceased on April 1, 1986. In 1989, the surface impoundments were closed in accordance with a NYSDEC approved closure plan. Closure included the removal of sludge and contaminated soil in and around the impoundments, and placement of fill and a cover system over the area.

Regulatory History

In March 1991, the NYSDEC issued a Hazardous Waste Management Permit (No. 4-2728-9/33-0) that included provisions for RCRA Corrective Action. The company conducted soil and sediment investigations as directed by the permit. The company also implemented a post-closure monitoring program for the surface impoundments. Based upon those investigations, the NYSDEC determined no further actions, other than the groundwater monitoring program, were required at the facility.

Data collected under the groundwater monitoring program indicate that the concentration of hazardous waste constituents in the groundwater downgradient of the facility has decreased substantially over time (See attached Figures). At present, constituent concentrations are near or below New York State's groundwater quality standards.

In August 1999, the NYSDEC issued a draft Order on Consent that will replace the Hazardous Waste Management Permit (No. 4-2728-9/33-0) which expired in 1996. The Order, which requires White Mop to continue the monitoring program for an additional four years, will take effect in October 1999.

Groundwater at the facility discharges to a drainage ditch which was installed adjacent to the New York State Thruway which runs along the southern boundary of the facility. Soil and water samples from the ditch indicate that the concentration of hazardous constituents are at or near background levels.

No additional Corrective Measures are contemplated at this time.

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.

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[3]
Groundwater	No	No	No	No	No	No
Air (indoors)	No	No	No	No	No	No
Soil (surface, e.g., <2 ft)	No	No	No	No	No	No
Surface Water	No	No	No	No	No	No
Sediment	No	No	No	No	No	No
Soil (subsurface e.g., >2 ft)	No	No	No	No	No	No
Air (outdoors)	No	No	No	No	No	No

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

Rationale and Reference(s): **The property is bounded by a fence and the downgradient side of the property is also bounded by the New York State Thruway, a limited access highway. There is no place for access to the property. The source of the contamination has been removed and the area has been covered with clean fill and capped. The plume of groundwater contamination has a limited geographic distribution and the magnitude of the contamination has diminished since closure of the**

impoundments. The company has implemented deed restrictions to preclude future development of the impoundment area. The company will continue to monitor the area to ensure that conditions remain stable. See attached Figures.

[3] 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"**[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)?

_____ 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):_____NA

[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.

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):__NA _

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

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):

_X_ 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 _White Mop Wringer facility, EPA ID #**NYD00206214**, located at **Riverside Drive, Fultonville, NY 12072** 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)_____ Date ___9/30/99__
(print) William E. Wertz, Ph.D.
(title) Senior Engineering Geologist

Supervisor (signature)_____ Date ___9/30/99_
(print) Edward C. Miles
(title) Chief, Engineering Geology Section
(EPA Region or State) New York

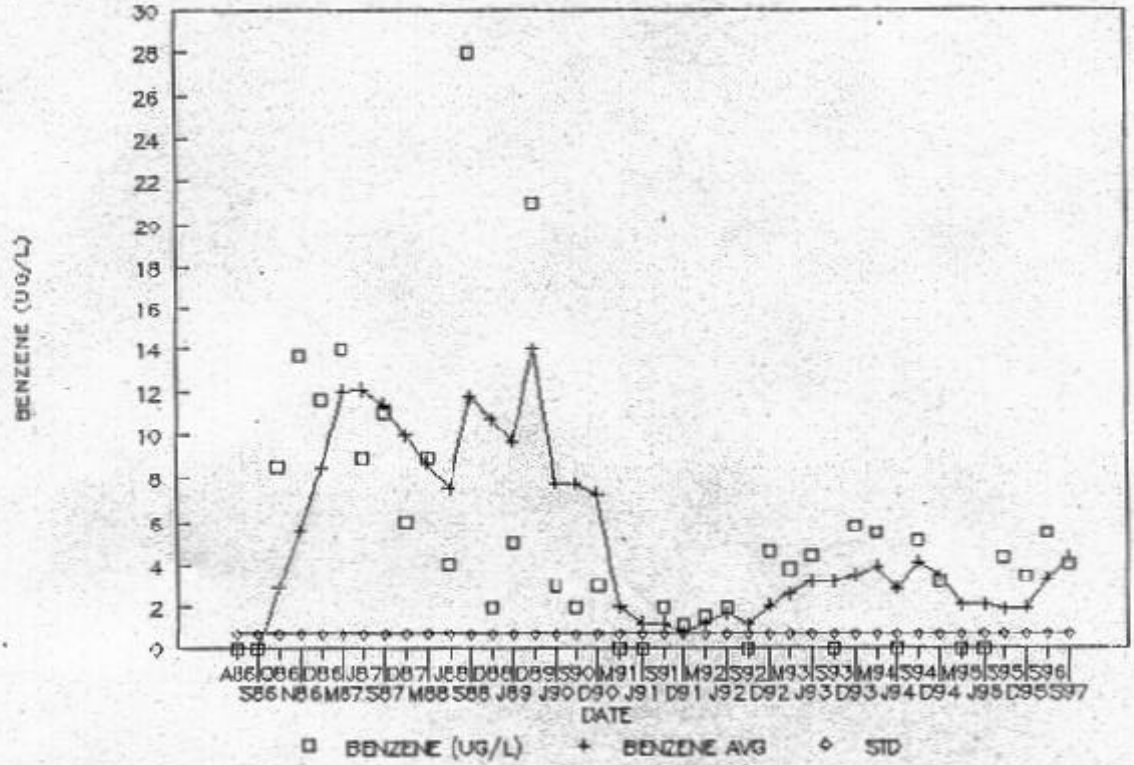
Locations where References may be found:
NYSDEC
Division of Solid & Hazardous Materials
Rm 460
50 Wolf Road
Albany NY 12233

Contact telephone and e-mail numbers

(name)__William E. Wertz
(phone #)___(518) 457-9253
e-mail) wewertz@gw.dec.state.ny.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.

WELL 5 TRENDS



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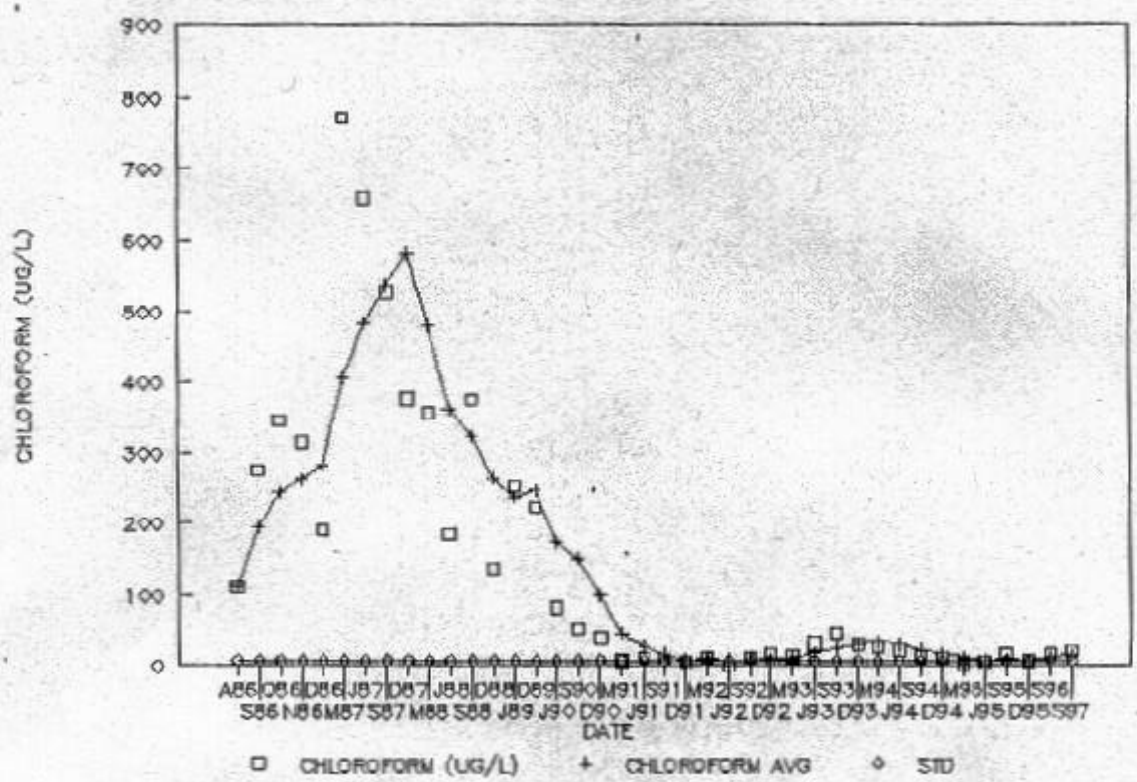

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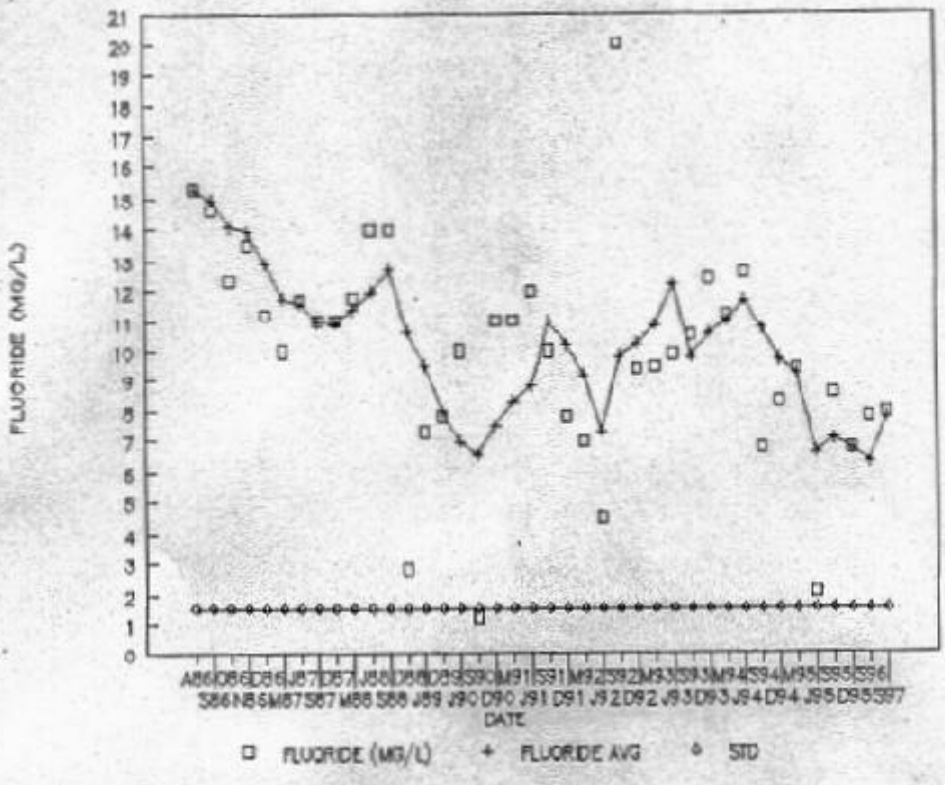

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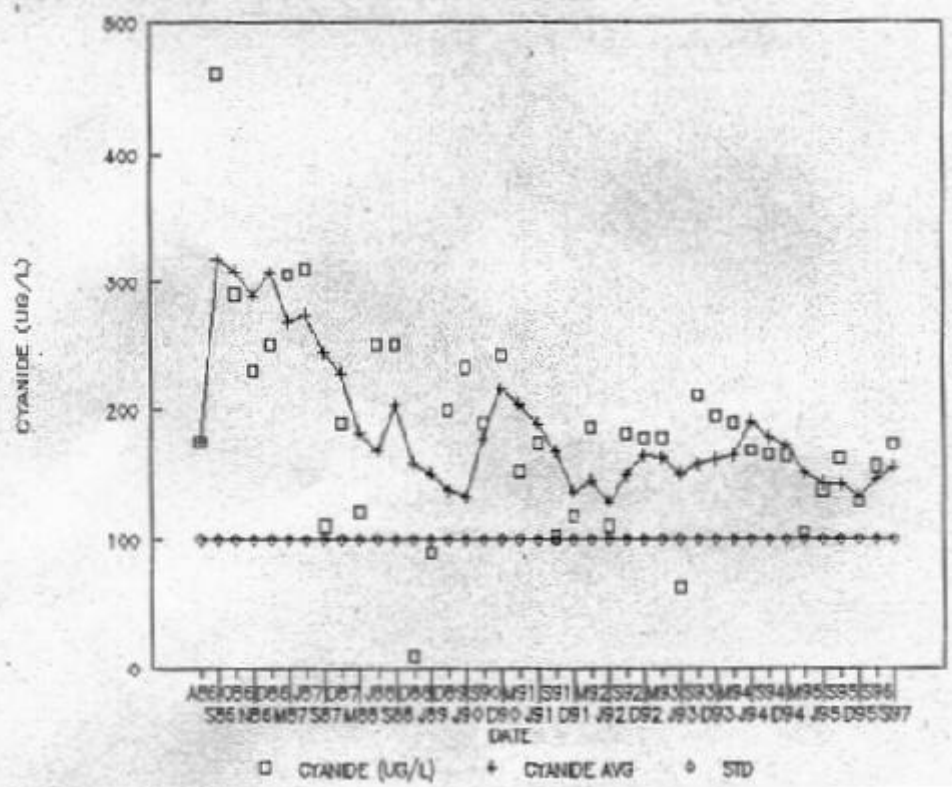

WHITE MOP WRINGER
Creek Soil Samples

Concentration:	SB-02-0.5	SB-02-2
VOCs (ppb)		
Chloroform	**1.00 u**	**1.00 u**
Benzene	**1.00 u**	**1.00 u**
Toluene	**1.00 u**	**1.00 u**
Ethylbenzene	**1.00 u**	**1.00 u**
m,p-Xylene	**1.00 u**	**1.00 u**
o-Xylene	**1.00 u**	**1.00 u**
METALS (mg/kg)		
Cadmium	0.42 U	0.45U
Chromium	14.60	31.4
Lead	6.3	13
Zinc	141	323
Total Cyanide	19.60	4.6