

RCRA Corrective Action
Environmental Indicator (EI RCRIS code (CA750)
Migration of Contaminated Groundwater Under Control

Facility Name: Bayer Corporation
Facility Address: 8500 West Bay Road, Baytown, Texas 77520
Facility EPA ID #: TXD 058260977

1. Has all available relevant/significant information on known and reasonably suspected releases to the groundwater media, 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 #8 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. AD EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "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 "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., nonaqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

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. Is groundwater known or reasonably suspected to be "contaminated" above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

- If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.
- If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."
- If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): Soil and groundwater sampling under CP-50173. Groundwater at the site is being controlled with pump and treat technologies. Semiannual and annual groundwater reports (submitted to the TNRCC per CP-50173) show that gradient is being reversed and controlled across the site. Flow meters at pumping wells record volumes of recovered groundwater. These data are also included within the semiannual and annual groundwater report.

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|----------------------------------|--------------------------|
| Groundwater - Key Contaminants - | Chlorobenzene - 300 ppm |
| | Dichlorobenzene - 80 ppm |
| | Nickel - 1 ppm |
| | Chrome - <1 ppm |
| | Lead - <1 ppm |
| | |
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Footnotes:

"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 appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

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8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), 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, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the Bayer Baytown facility, EPA ID #TXD 005826977, located at Baytown, Texas 77520. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

NO - Unacceptable migration of contaminated groundwater is observed or expected.

IN - More information is needed to make a determination.

Completed by (signature) _____ Date _____
(print) _____
(title) _____

Supervisor (signature) _____ Date _____
(print) _____
(title) _____
(EPA Region or State) _____

Locations where References may be found:

TNRCC Offices - Austin, Texas

Contact telephone and e-mail numbers

(name) Harry W. Heinlein, PE
(phone #) 281-383-6765
(e-mail) harry.heinlein.b@bayer.com

Harry W. Heinlein, PE 11/8/99

PM Review/Concurrence 1/9/00

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8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), 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, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the Bayer Corporation facility, EPA ID #TXD058260977, SWRN 30603, located in Baytown, TX. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

NO - Unacceptable migration of contaminated groundwater is observed or expected.

IN - More information is needed to make a determination.

- (1) Incomplete information
- (2) Reports in house, yet to be reviewed
- (3) Unfamiliar site

For "NO" or "IN" determination, expected date of "YE" determination _____

Completed by (signature) Maureen Hatfield
(print) Maureen Hatfield
(title) Project Manager

Date 01/13/00

Supervisor (signature) Cathy Remmert
(print) Cathy Remmert
(title) Supervisor
(EPA Region or State) TNRCC

Date Jan 24, 2000

Locations where References may be found:

see attached
If "YE" Code is assigned then attach a copy of database, highlight the reports which support "YE" determination. _____

Contact telephone and e-mail numbers

(name) Mr. Harry W. Heinlein.
(phone #) 281-3836765
(e-mail) harry.heinlein.b@bayer.com