Vogel Paint & Wax Co.

Maurice, Iowa

EPA ID#: IAD980630487

SSID: 071M

Purpose of Discussion

- **If the RPs perform a pilot test of a different remedy (bioremediation) and it is successful at achieving the RAOs, is an ESD or ROD Amendment necessary?**

- **Can the site be deleted from the NPL after the successful demonstration that MCLs at the point of compliance (which at this site has been defined as the site boundary) are being met?**

- **Will Five Year Reviews apply after site deletion?**

Legend
Groundwater Monitoring Well
Removed Groundwater Monitoring Well
Active Remediation Well
Inactive Remediation Well
Stream
Approximate Former Waste Disposal Area
Fence Line
Site Layout
Vogel Paint Waste Site
Maurice, Iowa
FIGURE
2

Site Background

- Vogel Paints & Wax manufacturing facility located in nearby Orange City
- Generated paint waste, resins, solvents, other solid wastes from 1971 – 1979
- Disposed waste on 2-acre pit located on their non-contiguous 80 acres property
- Operable Unit 1 is Soils (OU1)
- Operable Unit 2 is Groundwater (OU2)
- OU1 and OU2 contaminated with VOCs (BTEX) and metals
- IDNR initiated investigations in 1979
- IDNR Consent Orders with PRP in 1987, 1990, 2003
- The site was finalized on NPL in June 1986
- IDNR issued the Record of Decision (ROD) in September 1989
- EPA delegated lead oversight responsibilities to IDNR in June 1990
- IDNR issued an Explanation of Significant Differences (ESD) in July 1994
- IDNR issued a second ESD in October 2000

Site Background

- Predominantly agricultural uses on and surrounding properties
- ATSDR Health Assessment concluded no immediate public health threat in 1987
- Nearby residents on Rural Water District supply
- Nearby private wells used for non-household purposes and do not show impacts from site COCs

1989 Record of Decision

Soils Remedy: Excavation, Onsite Bioremediation, and Onsite Disposal of treated soils

Cleanup Objective for solid waste/soils is to reduce migration of contaminants into groundwater by removal and/or treatment of the source, i.e., the contaminated soils/solid waste.

Groundwater Remedy: Pumping, Air Stripping, and Discharge to Surface Water

Cleanup Objective for groundwater is to reduce contaminants in groundwater to established health-based standards for drinking water.

1989 Record of Decision

Section 2.6, Description of Alternatives – Alternative GW-1, Pumping Air Stripping, and Discharge to Surface Water:

Contaminated groundwater would be removed by pumping from one or more wells.....The need for additional treatment, however, is not anticipated. **Pumping and treatment would continue as long as necessary to reduce contaminant levels to established cleanup levels.**

Section 2.8, Selected Remedy – Alternative GW-1:

Contaminated groundwater would be removed by pumping from one or more recovery wells……. **Pumping and treatment will be continued until groundwater ARARs are met. A groundwater monitoring program, approved by the DNR, will be implemented and criteria for ceasing remedial action based on monitoring results will be developed.**

1994 ESD

"Description of Significant Differences and Basis for those Differences":

After implementation of the groundwater remedial system, free product (primarily xylenes) was found to be drawn to two recovery wells in addition to the previous well used for free product recovery. These two recovery wells have been retrofitted with free product recovery equipment. The original estimate of free product volume was 5,000 gallons. This estimate has been revised to at least 50,000 gallons. Free product recovery is now considered to be a more important factor in the ultimate site cleanup. Other actions to enhance free product recovery are being considered.

2000 ESD

"Description of Significant Differences, Groundwater Compliance":

The remedial action objective (RAO) for groundwater prescribed in the ROD is to reduce contaminants in groundwater to established health-based standards for drinking water. This ESD clarifies this RAO by specifying *where* health based standards must be achieved. With institutional controls applicable to the site property the use of on-site groundwater for drinking water will be prohibited. However the potential exists for contaminants migrating off-site to enter a drinking water supply, even if such a water supply does not currently exist. By ensuring that groundwater does not leave the site with contaminants at levels in excess of drinking-water standards, off-site exposure to contaminants from the site in groundwater at concentrations in excess of health based standards will not be possible. **Therefore, the site property boundary is being designated as the point of compliance for groundwater ARARs.**

2000 ESD, cont'd

The existing groundwater monitoring plan will be revised to provide a groundwater monitoring strategy that will be used to verify that migration of contaminated groundwater from the site is not occurring. **Revisions will include criteria to determine if, and when, discontinuation of active groundwater remediation (i.e., the ongoing pump and treat) is warranted. The criteria will include:**

- **no exceedance of chemical-specific ARARs at the property boundaries,**
- **no expansion of groundwater contamination as demonstrated by stable or decreasing groundwater contaminant levels throughout the site, and**
- **no other evidence that suggests the potential for migration of groundwater from the site at levels in excess of chemical-specific ARARs.**

History of Remedial Action

- **The current remedial action of pump & treat (P&T) was initiated with five extraction wells in 1991 and shutoff (with IDNR approval) in 2002 due to reduction of free product.**
- **The P&T was restarted with two wells in 2003 to prevent offsite migration of plume and then again shutoff (with IDNR approval) in 2005 due to stable plume conditions and declining concentrations in southern wells.**
- **In 2007, phytoremediation trees were planted and the P&T was restarted and operated on an as required basis to establish and water these trees during warmer months.**
- **In April 2016, the P&T was restarted with one well, and is currently operating. An additional well has had absorption socks put in for free product removal.**

Current Status of Remedial Action

- **The RP intends to pursue aggressive Pilot Test of in-situ bioremediation and liquid barrier walls installed along multiple areas of plume.**
- **Free product from and around one of the wells will be evaluated and extracted by bailing.**
- **If the Pilot Test is successful in achieving the MCLs at the site boundary, the RP's intention is to turn off the P&T but maintain the equipment in operational condition in the event it is needed.**

ESD or ROD Amendment?

- **RPs and the state do not believe that an ESD or ROD Amendment is necessary to implement the bioremediation and stop the P&T. However, they may be open to an ESD.**
- **RPs would like to pursue site deletion after the successful demonstration that MCLs at the site boundary are being met.**
- **The Iowa Department of Natural Resources would like to be part of the discussion with EPA HQ regarding the necessity of an ESD or ROD Amendment and site deletion.**

Potential ROD Amendment

Issue 1: Are the current decision documents (1989 ROD, 1994 ESD, 2000 ESD) prepared by IDNR and implemented under IDNR Consent Order adequate, or is a ROD Amendment necessary? The EPA agreed but is not a signatory to the ROD, and the EPA does not have any Consent Orders with the RP.

Discussion:

1. **Do the PRP's remedial activities comport with current decision documents?**
2. **Is there a need to amend the current decision documents?**

NPL Deletion & Site Closure

Issue 2: Would the site qualify for NPL deletion if the ROD is not amended?

Discussion:

1. **Would the criteria be met for NPL deletion?**
2. **If not currently, will the NPL deletion policy be revised to allow deletion?**
3. **Would NPL deletion allow for site closure?**

NPL Deletion Process

Close Out Procedures for National Priorities List Sites, OSWER Dir. No. 9320.2-22 (May 2011):

As detailed in the above referenced guidance, site deletion requirements include:

- ✓ the documentation of activities and decision making at the site is complete,
- ✓ the activities conducted and documented are verified, and
- ✓ the public has an opportunity for notice and comment before the site is formally deleted from the NPL.