RCRA PART B TERMINATION: A GEORGIA CASE STUDY

Facility Background and History

- > Former crude oil refinery located on 40 acres west of Atlanta metropolitan area
 - > Refinery operated from 1950s until 2004
 - > Since then, property leased to third parties as an asphalt terminal (principal products are paving and roofing asphalt)
- > Surrounded by a mix of industrial, commercial, and residential properties

Facility Background and History

- > On-site oil/water separator and four ponds used for treatment of process wastewater and stormwater
 - > Two ponds served as primary oil recovery units
 - > Two ponds were aerated and served as biological treatment and polishing ponds
- > Primary soil and groundwater contaminants from operations were BTEX compounds and Polycyclic Aromatic Hydrocarbons

Site Layout

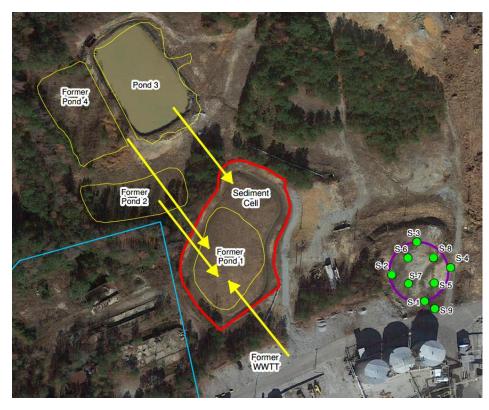


Regulatory History

- Long history of consent orders for multiple media dating back to the mid-1990s
- Plan to close ponds submitted to EPD in 1996
 - > Management of process wastewater in ponds discontinued
 - > Pond bottoms excavated and consolidated into Pond 1, which was closed in place as a Hazardous Waste Management Unit (HWMU)
- > RCRA Post-Closure Care Permit for HWMU Issued in 2001
 - Ultimately, fourteen Solid Waste Management Units (SWMUs) covered

Regulatory History

- Pond closure activities occurred between 1996 and 2007
 - Consolidation of sludges and/or soils from other
 3 ponds into Pond 1
 - Bioremediation followed by stabilization with fly ash
 - Capped with 12 inches of compacted soil, a low permeability geosynthetic liner, and two feet of final soil cover
- > Wastewater treatment tanks closed in 2007
- Other tanks and equipment demolished/closed in 2011-2012
 - > Sediment and heel from one tank (Tank 100) considered a listed hazardous waste (K169)



Demolition/Cleanup (2008-2014)



Barriers to Regulatory Closure (2015-2017)

- > HWMU and Tank 100 were not considered clean-closed locking the Site into RCRA's regulatory scheme, meaning:
 - Delineation to background (soil and groundwater)
 - > SWMU-based assessments
 - ➤ Remedial goals of Residential 10⁻⁶
 - > Groundwater protection based on conservative leachability values
- Outstanding investigatory and financial assurance obligations from decades-old consent orders

Path Forward (2017-2022 and beyond)

- > EPD and Permittee agreed that 1998 Cotsworth Memo might provide a path towards clean closure of HWMU and Tank 100
 - Closure standards for Constituents of Interest changed in 2017 as compared to 1998 (HWMU) and 2006 (Tank 100).
- > Permittee agreed to an environmental covenant prohibiting drinking water wells on the entirety of the property and limiting current and future use to commercial/industrial
- > EPD and Permittee agreed to a Master Project Plan to govern the path forward:
 - > Investigation
 - ➤ Risk Evaluation
 - ➤ Risk Report & Clean Closure Report
- ➤ Corrective Action (if any)
- Permit Termination, Consent Order, and Environmental Covenant



Investigation and Risk Evaluation (2017-2018)

- > Three Areas of Focus
 - > Site-wide investigation (soil & groundwater) based on identified data gaps
 - Sediment from creek (on-site and off-site)
 - > Groundwater at the true or hypothetical reasonable exposure
- Risk Evaluation
 - Constituents of Potential Concern (COPCs) Determined
 - > Chemicals of Concern (COCs) Identified
 - > Remedial Levels (RLs) (if any) Calculated
- ➤ No COCs in Soil Identified (HI < 1 and ELCR < 10⁻⁶)
- BTEX identified as COCs in Groundwater but Met RLs and MCLs at Property Boundary



Risk Report, Closure Report, Corrective Action, & Permit Modification & Termination

- Closure Report (HWMU and Tank 100) submitted (2019) and approved (2020)
- Risk Report submitted, revised, and approved (2019-2020)
- ➤ Corrective Action Plan submitted and revised (2020-2021)
 - Limited to groundwater monitoring and environmental covenant (fully executed Feb. 2022)
- > RCRA Permit Modification (noticed in 2021; issued Mar. 1, 2022)
- Consent Order (Mar. 1, 2022) and Financial Assurance funded (Mar. 4, 2022)
- > Corrective Action Completion (Mar. 11, 2022) & RCRA Permit Termination (Apr. 19, 2022)

Questions?

Jonathan E. Wells
Kazmarek Mowrey Cloud Laseter
jwells@kmcllaw.com
(404) 812-0156

