

AVX State Superfund Site Myrtle Beach Operable Unit 2

March 14, 2013

Bureau of Land and Waste Management
Update on Groundwater Remediation

General Site Information

- AVX is a State Superfund Site.
- Consent Order signed in 1996
- Groundwater contamination discovered off property in 2006.
- Site was divided into two operable units (OU-1 and OU-2) in 2010.
- Record of Decision for OU-2 signed in June 2012.
- Groundwater remediation is currently in progress.

Why Two Operable Units?

- OU – 1 : AVX Facility.
- OU-2 : Off Property Groundwater and Surface Water Contamination.
- The site was divided into two Operable Units so that the off-site contamination could be addressed as soon as possible.
- With the possible removal of buildings on the AVX Facility property, assessment of source areas beneath the buildings becomes feasible.
- Groundwater extraction wells on the facility property control any further off-site contaminant migration.

OU-2 Groundwater Treatment

- Groundwater is impacted by volatile organic compounds (VOCs).
- Selected remedy is enhanced anaerobic bioremediation.
- Remediation began with a pilot study in 2009.
- Pilot Study expanded in 2011.
- Remediation went full scale in 2012.

What is Enhanced Bioremediation ?

- Allows natural processes to clean up chemicals in the environment by adding an organic food source.
- Microbes consume the food source and break down the chemicals into water and harmless gases.
- At AVX, molasses is injected into groundwater as the food source.
- Groundwater data indicated that this process was already occurring to a degree at AVX.

Remediation Update

- 42 injection wells have been installed.
- Multiple injection events have occurred from pilot testing in 2009 until most recently in January of this year.
- Groundwater monitoring data shows a decrease in concentrations of TCE in off property monitoring wells.
- Injections will continue until concentrations are decreased to the point that VOCs in groundwater are at or near drinking water standards.
- An additional groundwater extraction well has been installed on the facility property.

Groundwater Data Comparison 2008 to 2012

2008 Data

- MW-23D: 7700 ppb
- MW-24D: 3800 ppb

2012 Data

- MW-23D: 255 ppb
- MW-24D: 202 ppb



Remediation System Photos



Filters

Photo 1



Filters and Water Tank

Photo 2



Water Tank

Photo 3



Filters

Photo 4



Piping

Photo 5



Checking Mixture (Molasses and Water)

Photo 6



Piping

Photo 7



Transect 1

Photo 8



Transect 2

Photo 9



Well Vault

Photo 10



Access Road

Photo 11



Well Vaults

Photo 12