Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Voluntary Cleanup and Property Redevelopment Program

Cash Grain & Feed, Grimaldi Property

Background

The Cash Grain & Feed, Grimaldi Property occupies 4.4 acres and is located at 501-503 South Joplin Street in Pittsburg, Kansas. Structures on the property include three large storage buildings along the west boundary, an office building, and concrete loading pads. Aerial photographs and topographic maps indicate that most of the site was a rail yard with multiple tracks when A&M Rentals/Grimaldi Family purchased the property and began the Cash Grain & Feed Co. Since 1969 Cash Grain has operated as a bulk fertilizer storage and custom blending facility. A February 2003 Brownfields Targeted Assessment and subsequent investigation of the property south of Cash Grain, also owned by A&M Rentals, indicated nitrate and ammonia soil contamination extended north onto the Cash Grain property. A&M Rentals applied to the Voluntary Cleanup and Property Redevelopment Program (VCPRP) on October 10, 2006. Copies of Phase I and Phase II Environmental Site Assessments (ESAs) conducted by Triad Environmental in 2006 were submitted with the application. A Voluntary Agreement was signed December 11, 2006.

Investigation

Following review of the ESAs, the VCPRP found that a Voluntary Cleanup Investigation (VCI) was needed to confirm ESA results and further define the magnitude and extent of lead, nitrate, and ammonia contamination. Results for soil samples from 31 locations indicated that most of the nitrogen soil contamination was on the southern and eastern parts of the property. The results also indicated nitrogen contamination wasn't migrating offsite via surface water runoff. Lead was detected above its residential risk-based standard (RSK) in one of 11 soil samples. The lead-impacted soil sample was collected in the former railroad right of way where chat was visible. Chat is waste gravel from lead and zinc ore processing that was commonly used as ballast for railroad tracks and often contains lead above regulatory limits. Groundwater was determined to be non-potable based on yield.

Asphalt cap covering consolidated material.

Stormwater retention pond and vegetative cover.

Solution

The cleanup action included consolidating highly impacted soils into an onsite burial area and covering it with a 4-inch impermeable asphalt cap, constructing a retention pond for storm water runoff, backfilling excavated and or low-lying areas with approximately 450 cubic yards of clean fill soil, grading the site, seeding vegetated areas with a mixture of fescue and wheat, and implementing environmental use controls (EUCs) that (a) assure maintenance of the asphalt cap and vegetative cover and (b) limit exposure to possible lead contamination by restricting land use to non-residential purposes. Earth and seeding work was conducted in Fall 2008, the asphalt cap was constructed in June 2009, and EUCs were implemented in August 2009. The Southeast Kansas Recycling Center plans to acquire the property and use the buildings and land to support an expansion in recycling operations.

Benefits:

- **Nitrogen and lead contaminated soils were consolidated and capped to prevent exposure.**
- **Environmental Use Controls protect future use of the site.**

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