TRONOX BANKRUPTCY SETTLEMENT

SITES AND RECOVERIES FOR CLEANUP COSTS

Henderson, Nevada – $1.118 billion for prospective cleanup costs

Groundwater at a former chemical manufacturing facility in Henderson, Nev., has been impacted by hexavalent chromium and perchlorate, among other contaminates, due to the manufacture of chlorates, perchlorates, and numerous other chemical products since the 1940s. The contaminant plumes have migrated towards the Las Vegas Wash, and in 1998, before the sites' groundwater treatment system began operation, the perchlorate levels in groundwater near the Las Vegas Wash were more than 5,000 times higher than the provisional drinking water standard for perchlorate in Nevada. Las Vegas Wash is a tributary to Lake Mead; Lake Mead supplies approximately 85 percent of the total water used in the Las Vegas Valley and provides municipal water supplies in Arizona, Southern California, including Los Angeles, and Southern Nevada. Currently, slurry walls, a groundwater remediation system, and extraction wells are in use at the site to contain and control the contaminant plumes; however, as of 2010, concentrations of perchlorate in groundwater still exceeded the provisional standard in some areas at the site, and in some cases by several orders of magnitude.

Navajo Abandoned Uranium Mines – $985 million for prospective cleanup costs

Kerr-McGee left abandoned uranium mine sites, including contaminated waste rock piles, in the Lukachukai mountains of Arizona and in the Ambrosia Lake area of New Mexico. The Lukachukai mountains are located immediately west of Cove, Ariz., and are a culturally significant part of the Navajo Nation; the Ambrosia Lake area is just outside the Navajo Nation. The mining occurred from the late 1940s through the 1960s in the Lukachukai area and from the 1950s to the 1980s in Ambrosia Lake. Navajo gather plants and herbs from the Lukachukai mountains for everyday and ceremonial uses, and in the summer months, establish sheep-grazing camps there. Cove includes residences, the Cove Chapter House and the Cove School. Runoff from snowmelt in the Lukachukai mountains forms surface water features that flow past Cove and into the valley beyond. Human health risks are associated with exposure to the uranium and uranium decay products in soil, dust, air, groundwater, surface water and/or sediment and exposure pathways include: direct radiation exposure proximate to the waste rock piles; direct radiation exposure to radioactive materials used in building structures; ingestion of radiologically-impacted groundwater used for drinking water supply; ingestion of and dermal contact with radiologically-impacted surface waters; and inhalation and/or ingestion of windblown radioactive dust.

Manville, NJ – $217 million for past response costs; $4.5 million in Natural Resource Damage penalties to be paid to New Jersey as Natural Resources Trustee

Note that the proceeds EPA will receive for this site cover EPA's past costs expended at the Site, so while they will not address ongoing threats to human health and the environment, they will reimburse the significant response costs EPA spent at the site out of the Superfund, shifting the burden for cleanup from the taxpayers to the PRP. From 1910 until the mid-1950s, the site was used as a wood treatment facility, which occupied approximately 50 acres in the Borough of

Manville. The facility treated railroad ties and telephone poles with coal tar creosote. The excess product was discharged as creosote-contaminated sludges, sediments, process residuals, preservative drippings, and spent process liquid into canals to two lagoons located on the site. Starting in the 1960s, the facility was redeveloped as a mainly residential and commercial area. EPA response actions at the site included the clean-up of 93 residential properties and the removal of over 275,000 tons of soil. In 2002, EPA determined that it was technically impracticable to remediate groundwater to applicable cleanup standards, which entitled New Jersey to a Natural Resource Damage claim for the injury to the groundwater resource at the site.

Riley Pass, SD – $179 million for prospective work

The site is located in the North Cave Hills area of Harding County, South Dakota, primarily on a series of bluffs within the Custer National Forest where strip mining of uranium-bearing lignite took place in the 1960s. Arsenic, molybdenum, thorium, uranium, and radium-226 are the chemicals of concern at the site. The bluffs are very steep and relatively low quantities of natural organic matter and nutrients in the area hinder the establishment of vegetation to prevent erosion of contaminated wastes (overburden and spoils piles) and their transport by wind and water. Mining spoils at the site have been a major source of sedimentation to two nearby streams, Schleichart Draw and Pete's Creek.

Chicago (Lindsay Light Removal Sites, Streeterville Rights-of-Way, and DuSable Park) – $119 million for prospective work

Beginning in 1904 and continuing through the mid-1930s, the Lindsay Light Chemical Company processed ore to extract radioactive thorium and manufactured gas mantles containing radioactive thorium at three locations in an area in downtown Chicago known as the "Streeterville Area." (Lindsay Light merged with American Potash & Chemical Corporation, which was acquired by Kerr-McGee.) The process of gas mantle manufacturing involves dipping gauze mantle bags into solutions containing thorium nitrate and small amounts of cerium, beryllium and magnesium nitrates; the principal ingredient in thorium nitrate is radioactive thorium (thorium-232), which emits alpha, beta, and gamma radiation. The thorium processing and gas mantle manufacturing activities produced thorium-contaminated material, and the material was used as fill in construction activities on neighboring properties in the area, and in utility installations in the City-owned street and sidewalk rights-of-way, leading to significant offsite spread of the contamination throughout the Streeterville Area.

Columbus, MS – $67 million for prospective work

The site is a former wood treatment facility, which began operations in 1928. Kerr-McGee purchased the facility in 1964 operated it until its decommissioning in 2003. At the facility, wood products were treated with creosote, coal tar, and, until 1976, pentachlorphenol. Open ditches were used by Kerr-McGee for years to transport surface water runoff from the site to Luxapilila Creek; the ditches lie within the 100-year flood plain and during numerous floods throughout the years, overflowed their banks, spreading creosote contamination and polyaromatic hydrocarbons offsite and into the neighboring yards of residents. (One of the ditches traverses the property of the Maranatha Faith Center, where creosote contamination was found during construction activities.) Kerr-McGee also operated two hazardous waste surface impoundments at the facility, as part of an industrial wastewater treatment system. Creosote

contaminants have also been found in groundwater at the site. The site has been the subject of CERCLA response actions and RCRA corrective actions.