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Inside

- Bayou Creek Discharge Sampling Event Pg. 2
- Northeast Plume Optimization Project Dispute Settled Pg. 2
- 2014 DWM PGDP Annual Report Issued Pg. 3

Oversight News

Newsletter of the Commonwealth's Environmental Oversight of the Paducah Gaseous Diffusion Plant (PGDP)

*Kentucky Department for Environmental Protection
Division of Waste Management
Hazardous Waste Branch
Paducah Gaseous Diffusion Plant Section*

C-410 Water Treatment Completed



C-410 basement storm water and treatment system



C-410 basement storm water

Treatment of radioactively contaminated storm water retained in the C-410 Section 26 basement commenced the week of Aug. 31 and was completed the week of Oct. 5. Approximately 75,000 to 80,000 gallons of water was treated on-site through a package treatment system. The treated water met a 98 percent reduction in contaminant load for Uranium and a 95 percent reduction in Technetium-99. The water was discharged through internal plant ditches and piping, ultimately discharging at outfall 001. Kentucky and the Department of Energy (DOE) collected confirmatory samples before and after each batch of water was treated. Kentucky independently verified DOE's analytical results. Both Kentucky and EPA approved each discharge event.

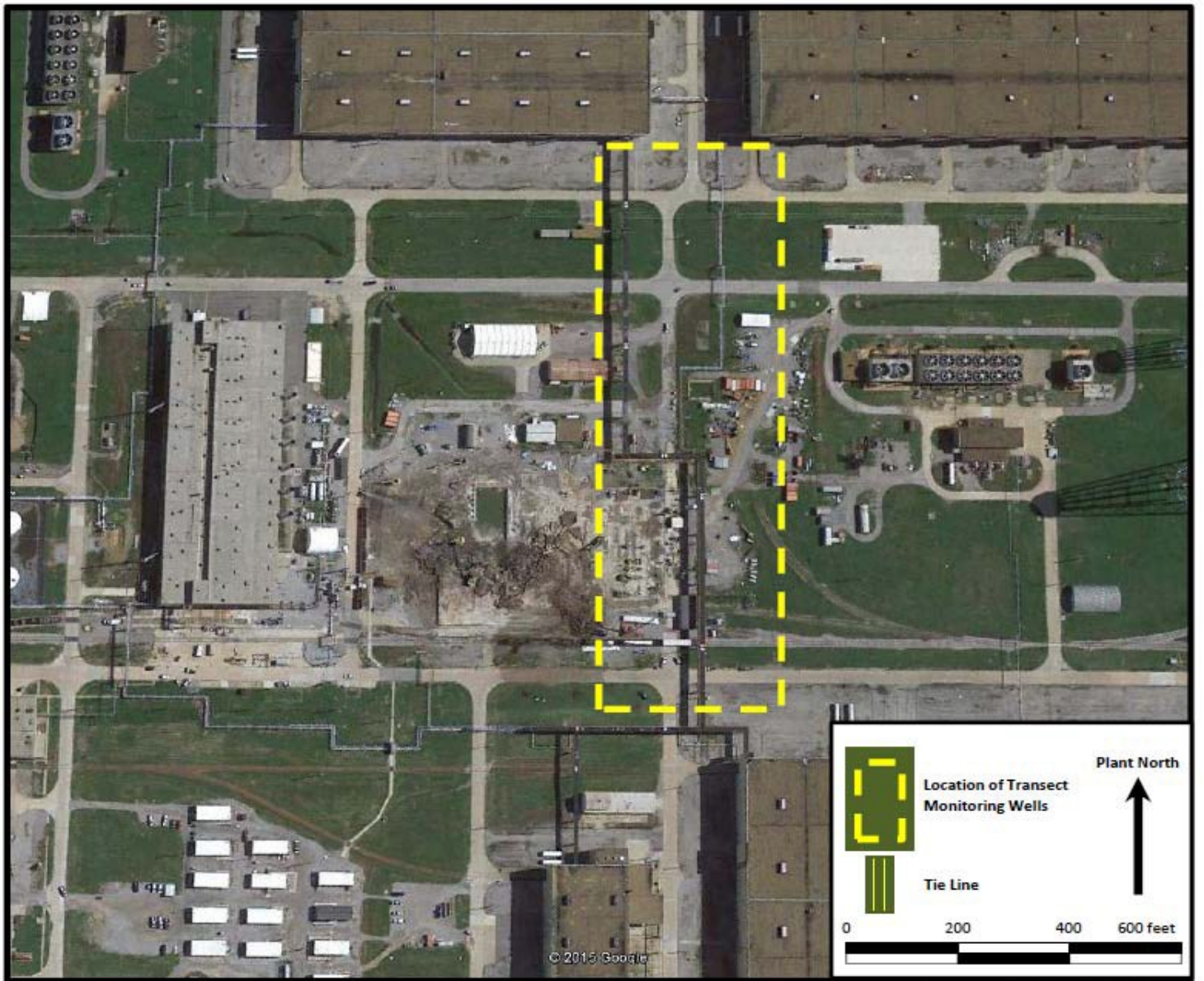
Northeast Plume Optimization Project Dispute Settled

The formal dispute on the Northeast Plume Optimization project was resolved on July 31. The optimization project relocates two extraction wells upgradient from the existing extraction wells. Each well will have a dedicated treatment unit. This will increase trichloroethylene (TCE) mass removal and enhance control of the northeast plume migration at the eastern edge of the Paducah Gaseous Diffusion Plant (PGDP) facility. The Federal Facilities Agreement (FFA) parties agreed to install a row of sentinel groundwater monitoring wells approximately 600

feet east of C400. The sentinel wells will be used to assess the impact of the new groundwater extraction wells on contaminant migration from source areas, including impacts to the groundwater divide east of the C400 building. The sentinel wells will be monitored quarterly for technetium-99 (Tc-99) and TCE. The first four quarters of data will be used to establish baseline concentrations of Tc-99 and TCE. Subsequent monitoring results will be compared to the baseline. If contaminant concentrations in any transect well's quarterly samples are determined to be increasing greater than twice the baseline within a year of showing

the initial increase, then potential changes in groundwater flow or source impacts will be further examined by the FFA project team. The team would consider adjustments such as adjusting pumping well rates to minimize these potential impacts. Currently, the FFA project team is working to site the sentinel wells in the most optimal locations within the yellow dashed rectangle on the map below. The project team will consider spatial distribution of the transect wells in addition to determining the screen length and location.

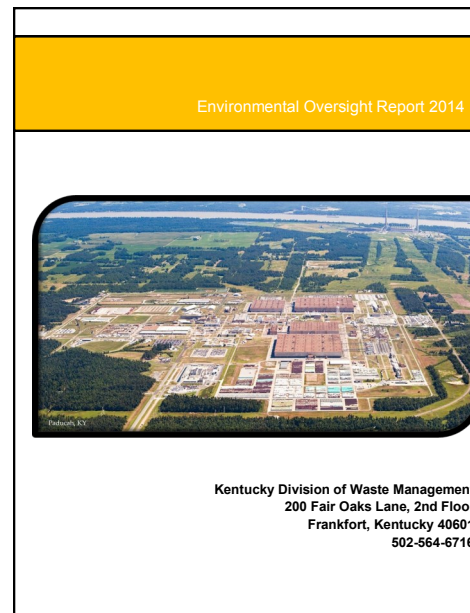
Map courtesy of DOE.



2014 DWM PGDP Annual Report Issued

The 2014 Annual Report for the Division of Waste Management Paducah Gaseous Diffusion Plant Section was issued September 21. The annual report details sampling and analysis of data performed by the Agreement in Principle (AIP) staff. It also records the activities of the Federal Facilities Agreement (FFA) staff. It may be accessed at:

<http://waste.ky.gov/HWB/Pages/PaducahGaseousDiffusionPlant.aspx>



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The mission of the Kentucky Division of Waste Management is to protect human health and the environment by minimizing adverse impacts on all citizens of the Commonwealth through the development of fair, equitable, and effective waste management programs.



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Kentucky Environmental Oversight News is published quarterly by the Kentucky Department for Environmental Protection's Division of Waste Management. It features information regarding environmental cleanup activities at the Paducah Gaseous Diffusion Plant site and related topics. Additional information is available from:

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