Frequently Asked Questions

Corrective Measures Study

Former Wood Preserving Area
JEA - Kennedy Generating Station
Jacksonville, Florida
December 2014

JEA proposes to implement corrective measures to clean up soil, groundwater, and sediments affected by previous owners of a wood treating operation located on property that is now part of JEA's Kennedy Generating Station (KGS). The following questions and answers provide information about the site and JEA's cleanup plan.

1. What is the focus of the remediation?

The site was contaminated during the operation of a wood treating facility and various creosote import operations that took place before JEA owned the property. Soil, surficial groundwater, and sediments were affected by these operations. The constituents of concern (COCs) related to the past operations have been determined to be arsenic in soils and groundwater, and creosote (polycyclic aromatic hydrocarbons [PAHs]) in soils, groundwater, and sediment.

2. What are the origins of the contamination and when did it occur?

The contamination was originally caused by former owner/operators Bernuth Lembcke Corporation and Eppinger and Russell Corporation. These companies performed wood treating activities on the site between 1909 and 1966. Bernuth relocated its facilities to offsite locations and continued operations from 1966 until 1992.

3. What are the constituents of concern?

Arsenic, Creosote, and PAHs. All were part of the wood treating process used at the site until the early 1960s and released to the environment. Creosote is a wood preservative used for commercial purposes such as treatment and preservation of telephone poles, dock pilings, or railroad

ties. PAHs consist of a group of organic compounds that were present in the creosote, and arsenic was present in the metal salts used at the site. Although the concentrations of these contaminants at the site are greatly reduced from their original levels, these contaminants can be persistent in the environment, and there are still areas of contamination that need to be addressed to meet the remedial goals for the project.

4. Is there a current human health risk to the general public?

No. Site conditions do not pose a human health risk to the general public because the site is a controlled access facility.

5. Why is JEA responsible for the cleanup if the prior owner operations affected the site?

JEA is the current property owner and entered into a Consent Order with the Florida Department of Environmental Protection (FDEP) in January 2006 to address the contamination. As the respondent to FDEP under the Order, JEA is responsible for the assessment and remediation of contamination remaining on the site or originating from the site it purchased from others. JEA wants to improve the environmental condition of the property.

6. What is the cleanup plan?

For the upland areas, the cleanup will include removal of affected off-property surface soils along the southern property boundary, and re-grading, covering, and paving the eastern part of the site with an asphalt cap. This prevents human exposure and rain water from coming in contact with soil at the site. For groundwater, JEA will continue to operate a Groundwater Recovery System that JEA installed in 2012, which is designed to ensure that contamination does not enter the St. Johns River. JEA will pilot test removal methods for creosote-like fluids that persist in several small, isolated locations and may modify this approach based on results. Land use controls will ensure that the property is only used for industrial or commercial purposes in the future and that groundwater will not be used in the area. For the sediments in the river adjacent to KGS, the cleanup will consist of the removal of affected sediments followed by long-term monitoring.

7. How was the method of remediation determined?

A ranking evaluation of a range of potential remedies for affected soil, groundwater, and sediments was performed. The ranking criteria are designed to ensure protection of human health and the environment while also considering such aspects as remedy implementability, long- and short-term reliability, and cost effectiveness.

8. How does the cleanup plan protect the environment in the river?

JEA will continue operating a Groundwater Recovery System that ensures that contaminated groundwater from the site does not enter the river. For the sediments, extensive sampling has shown that most of the area offshore already meets the cleanup targets; however, there are a few remaining areas where PAHs in the sediments are at levels that create a potential impact to the indigenous biological community. Sediment in these areas will be removed and backfilled with clean sand. The entire area will be monitored over time to demonstrate remedy effectiveness.

9. How does the plan protect against future human health exposure?

Site conditions do not pose a human health risk to the general public because the site is a controlled access facility. Site workers will be protected once the site is capped. Groundwater use will be restricted, eliminating the potential for ingestion from drinking water. Construction workers will be protected by a requirement for development and approval of a soil management plan should excavation below the cap take place in the future.

10. How will the removed soil be managed?

Soils will be consolidated under the cap during re-grading of the site, including a small strip of offsite soils. The removal and backfilling process for soil will be completed using conventional earthwork equipment.

11. How will the sediment with high PAH levels be removed from the river?

An environmental clamshell bucket equipped with global positioning system (GPS) equipment, and features that minimize sediment re-suspension and more effectively achieve removal will be used to dredge the

sediment. The excavated material will be transferred to the KGS uplands, and then dewatered, stabilized, and incorporated under the site cap.

12. Will the soil be transferred from the property?

Offsite disposal of soils is not anticipated; however, any excess soil that cannot be contained onsite and needs to be shipped offsite will be tested and trucked in covered hoppers to an EPA-approved facility for disposal.

13. What is the cost of remediation?

JEA's consultant has estimated that the total expected cost of the remedial actions to be undertaken by JEA will be approximately $13 million.

14. Who will pay the cost of remediation and will this affect my monthly utility bill?

JEA will pay the estimated cost. JEA collects funds through its rate structure for environmental obligations. No rate increase is expected in relation to these remedial activities.

15. How will JEA confirm the effectiveness of its remedial plan?

Groundwater at the site and sediment offshore will be subject to long-term monitoring to confirm effectiveness.

16. How deep will the excavations be? How many cubic yards do you expect to remove?

The off-property soil removal area will be excavated to a depth of 2 feet and is estimated to involve about 2,200 cubic yards of soil. Some deeper excavations in the range of 5 to 10 feet will likely be involved with the installation of the stormwater pond system. Sediments will also be removed to a depth of 2 feet and replaced with clean fill. The actual volume of sediments requiring removal will be confirmed during the implementation phase but is estimated to be 2,000 to 3,000 cubic yards.

17. When will the cleanup project be complete?

Following approval of the Corrective Measures Study, it will take approximately 3 to 4 years to complete design, specification, bidding, and construction activities. Post-remedial monitoring activities and continuing obligations are expected to last indefinitely.

18. Who can I contact if I have additional questions or want more information?

JEA representatives:

Matt McClure – (904) 665-6253

Jaclyn Taricska – (904) 665-4243

****

Public Involvement and Outreach

A repository of relevant documents has been established in the JEA offices at 21 W. Church St, 8th floor in Jacksonville, Florida.

Documents can also be found at www.Oculus.com, click on "Public Oculus Login" and search by keyword.