

Fact Sheet Update No. 5

Decommissioning and Redevelopment

JEA - Southside Generating Station

Jacksonville, Florida

February 2008

Introduction

This is the fifth update to the November 2002 Fact Sheet on the decommissioning, demolition, environmental restoration and redevelopment of the JEA Southside Generating Station (SGS) in Jacksonville, Florida. The last update was published in April 2005. Topics covered in this update include a site description; an update of the activities performed at the site since April 2005; the current status of the site; a summary of future activities proposed for the site; and, information for public participation in the Brownfield Site Redevelopment process.

Site Description

The SGS site is the former location of a fuel-oil and natural gas-fired electric generating station. The station originally went on line in 1947, but was taken off-line in October 2001 due to replacement by newer production facilities in Jacksonville. A new gas-insulated switchgear (GIS) substation was constructed in the southern portion of the site in 2003. This GIS serves the south side area of the City and represents the first reuse of the property.

The site comprises approximately 42 acres on the south bank of the St. Johns River in downtown Jacksonville proper. The site's western side adjoins the eastern terminus of the City Riverwalk; the eastern side is defined by an unnamed tributary to the St. Johns River; the northern side abuts the River; and, the southern side adjoins residential and commercial properties.

The site has undergone decommissioning, demolition, and environmental activities in order to prepare for redevelopment. Closure of the SGS site is being performed jointly under the Resource Conservation and Recovery Act (RCRA) and the Brownfield Site Rehabilitation Program administered by the Florida Department of Environmental Protection (FDEP).

Activities To Date

Based on site operational history, thirteen Areas of Concern (AOCs) were identified and used subsequently to plan and execute an environmental investigation of the site.

Soil

Interim source removals (ISRs) commenced in 2003 and were completed in 2004. Completion Reports detailing the results of the ISRs have been approved by FDEP. Approximately 2.5 feet of clean unrestricted fill has been placed across the site.

The *Soil Corrective Measures Study* was completed in March 2006 and was approved in May 2006. Based on the concentration of PCBs remaining in the former east pond (AOC 2, See Figure 1), a cap must be placed over this area of the site in conjunction with site development. The recommendation of No Further Action for the remaining soil at the site was accepted contingent upon the *Groundwater Corrective Measures Study* addressing the arsenic concentrations in soil exceeding

Decommissioning and Redevelopment

JEA - Southside Generating Station

the leachability criteria and a commitment to provide a cap over an area of residual PCB contamination in AOC 2.

Groundwater

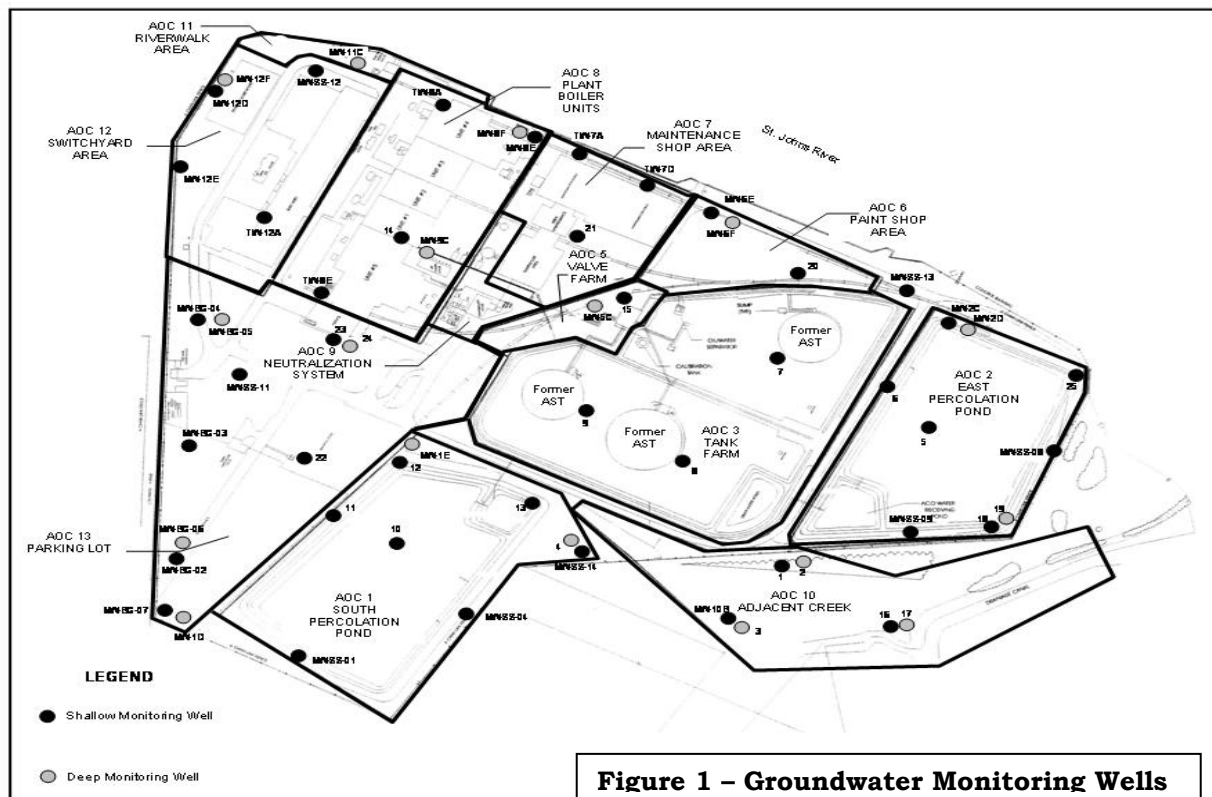
Fifty-nine groundwater monitoring wells (42 shallow wells approximately 10-15 ft. deep and 17 deeper wells approximately 17-25 ft. deep) comprise the site-wide groundwater monitoring network as shown in Figure 1. These 59 wells were sampled during three rounds of comprehensive groundwater sampling in January 2004, June 2004 and June 2005. Samples were analyzed for volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); polychlorinated biphenyls (PCBs); total recoverable petroleum hydrocarbons (TRPH); metals; sulfate, chlorides, and sodium.

In addition to the 59 wells requested by FDEP, 25 wells were installed and sampled

in June 2005 as part of a due diligence process.

Data acquired from these sampling events indicated that metals (arsenic, nickel and vanadium) are the analytes of main concern for groundwater at the site. Concentrations of these metals were measured at greater than the Groundwater Cleanup Target Levels (GCTLs) in both shallow and deeper groundwater. In some wells the concentrations exceeded the Natural Attenuation Default Criteria (NADCs). There were also some sporadic GCTL exceedances by a few VOCs and SVOCs; one exceedance of the lead GCTL was observed.

Wells which reported concentrations of COCs exceeding the NADCs during 2004 and/or 2005 were resampled and analyzed in February 2006.



Based on the distribution of the nature and occurrence of the GCTL exceedances, distinct patterns of groundwater contamination as source-related plumes were not indicated. Rather, the isolated occurrences were hot spots attributable to industrial activities preceding JEA ownership. There was no evidence of gross or site-wide groundwater contamination. The *Sitewide Groundwater Monitoring Report*, presenting all acquired data from both rounds of sampling and related activities, was submitted to FDEP in April 2006.

The *Groundwater Corrective Measures Report* was also submitted to FDEP in April 2006 and conditionally approved in October 2006. The approved corrective measure included installation of a slurry wall along the northern and western property lines to funnel the flow of groundwater to two reactive barrier gates. A pilot study to demonstrate the effectiveness of the proposal would have been required prior to full-scale construction. The buyer's group withdrew from their pursuit of the property in June 2007.

JEA requested that their team of environmental consultants review the proposed corrective measures with regard to cost, schedule and appropriate use of the technology. An amendment to the Groundwater Corrective Measures Report was prepared and submitted to FDEP in July 2007 which recommended the following measures:

- Targeted in-situ oxidation of arsenic in two AOCs.

- Hydraulic control to prevent migration of the contaminated groundwater into the St. Johns River using four well clusters. Extracted groundwater may be discharged to the sanitary sewer system for treatment.
- The majority of the site will require no further action for groundwater contamination. Monitoring of groundwater quality will continue until remediation is complete to the GCTLs.

Figures 2 and 3 illustrate the areas of the site where each of these measures will be implemented.



Figure 2 - Targeted Oxidation Zones

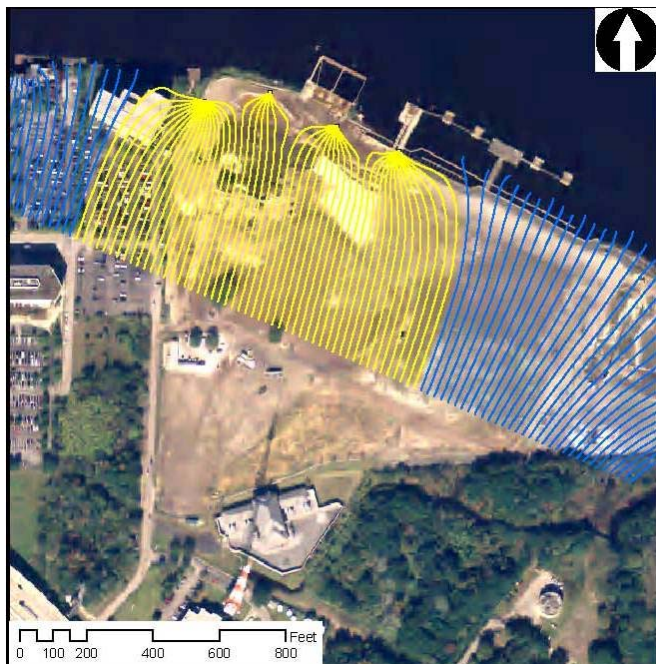


Figure 3 – Hydraulic Control Zones

Site Redevelopment

The first part of the site to be redeveloped was the former south percolation pond (AOC 1) where the new Gas Insulated Substation is now sited. JEA also plans to build a chilled water plant in this area.

The remainder (approximately 34 acres) is available for redevelopment by the private sector. Redevelopment plans will include public access elements such as a riverwalk extension, park component and/or buffer lands.

Current Status

All decommissioning, demolition and ISR activity has been completed. To date, approximately \$25,000,000 has been spent, including costs for demolition, disposal, and environmental activities.

Due diligence is still underway. JEA is continuing groundwater quality monitoring under the Brownfield Site Rehabilitation

Agreement. FDEP is reviewing the Amendment to the Groundwater Corrective Measures Study that was completed in July 2007. JEA is currently negotiating with the Duval County School Board regarding a potential property swap associated with improving access to the redevelopment site.

When approval of the remediation plan has been received from FDEP, JEA is prepared to implement the corrective measures and continue actively working toward site closure. The estimated cost for the planned active remediation and monitoring is \$654,000 over three years.

Proposed Activities

With approval from FDEP, deed restrictions will be developed and recorded as part of the long-term management requirements for the site, including restrictions on excavation; prohibition on groundwater use; and, maintenance requirements to ensure the integrity of the 2.5-ft. cover of clean, unrestricted fill.

Public Outreach

A repository of relevant documents has been established in the JEA offices at 21 W. Church St, 8th floor in Jacksonville. These documents may be reviewed by contacting one of the following:

Matt McClure – 665-6253