



Recent On-Site and Off-Site Activities

February 2013

Introduction

Cleanup activities related to the Solid State Circuits Superfund site in Republic are overseen by Missouri Department of Natural Resources and U.S. Environmental Protection Agency, or EPA. The department is the lead-agency for this site, and EPA is the support-agency. This information was prepared to update interested parties in the cleanup progress of the site, including recent activities occurring in fall and winter 2012.

Site Background

In the late 1960s into the early 1970s, Solid State Circuits used Trichloroethylene, or TCE to clean circuit boards as part of the manufacturing process. In 1982 TCE was detected in Municipal Well No. 1 during a drinking water study. Shortly thereafter Municipal Well No.1 was taken off line and has not been used since the discovery. Investigations by the department determined the Solid State Circuits site was the source of TCE contamination in groundwater. The site covers about a half-acre in downtown Republic at the southeast corner of the intersection of Main and Elm Streets.

Regulatory agencies took immediate response actions in the 1980s including removing Municipal Well No. 1 from service, removing 2,000 cubic yards of contaminated soil from the site and installing a fence with a locking gate for security around the site.

Following these response actions, Solid State Circuits-under department oversight-designed and constructed a groundwater extraction and treatment system. The groundwater extraction and treatment system has removed about 83 gallons of TCE. A groundwater monitoring program was implemented to monitor groundwater beneath and near the site; including a very deep groundwater aquifer providing drinking water to Republic. Routine sampling of all active Republic water supply wells is included in this program; these wells are sampled at least once per year. To date, TCE remains undetected in any municipal wells serving as a source of drinking water.

Recent Site Activities

In 2010, additional soil impacts were discovered during a supplemental soil investigation conducted on and near the site. In response, the regulatory agencies approved a pilot test in June 2012 to treat the impacted site soils. The treatment process included use of a chemical oxidant proven to destroy TCE. The chemical oxidant was mixed with excavated on-site impacted soils. This process involved mechanically blending the oxidant with soil using heavy machinery. This work was completed in November and December 2012. On-going monitoring of the groundwater near the site will continue throughout 2013 to evaluate effectiveness of this soil treatment on reducing TCE levels in groundwater within the shallow aquifer.

The shallow groundwater in and around the site is not used for any drinking water purposes, since regulatory agencies and Solid State Circuits instituted several layers of protection to prevent and minimize human exposure. As part of the precautionary measures to prevent any exposure to groundwater, Republic developed a city ordinance to ensure future drinking water wells were not constructed near the site. In addition to the city ordinance, state law prohibits drilling of drinking water wells at and around the site.

Additional Information

The site administrative record is available during normal library hours:

Springfield/Green County Library
Republic Branch Library
1264 U.S. Highway 60 E
Republic, MO

Questions or requests for information can be submitted to:

[Candice McGhee](#)

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