

# Constructed wetland removes plume contaminants

---

BY JILL NOLIN • OCTOBER 15, 2010

---

From The Montgomery Advertiser

It's a powerful 41-acre system that constantly is working to remove contaminants from the groundwater in an area of Montgomery, yet it does not run on mechanical parts.

Tucked away off North Boulevard, the treatment system for the Coliseum Boulevard Plume is an example of nature fixing a man-made problem -- and so far, it is working.

"It's quite a machine, just without moving parts. Except for the water," said Alec Van Ryan, project information officer.

Using more than a dozen different plants, a constructed wetland removes the majority of the trichloroethylene (or TCE) that is in the groundwater in the Coliseum Boulevard area. Water tests during the past few months have shown that there is not a detectable amount of TCE in the water once it finishes flowing through the constructed wetland.

That is, of course, not the case when it first enters the area. Today, the groundwater has less than 20 parts per billion of TCE, but that concentration is expected to rise to about 50 parts per billion over time, according to Van Ryan.

There are more than 2,200 property owners who either reside over the plume, which is about 15 feet below the land surface, or are in the plume's projected path. The plume is expected eventually to reach out just above West North Boulevard to the north, and it likely will extend west of Lower Wetumpka Road and past Emory Folmar Boulevard to the east.

The Alabama Department of Transportation has been charged with resolving the problem and compensating property owners for the loss in property value since it settled a lawsuit in 2005.

The department agreed to pay \$5.5 million to more than 1,500 residents of the Chisholm, Eastern Meadows and Vista View communities whose property was located above the original plume site.

Beyond compensating property owners, the department sought a treatment solution and opted to undertake a \$4.7 million construction project to treat the water.

Tony Harris, a Department of Transportation spokesman, said the agency considered other treatment options but went with the constructed wetland because it was less expensive than other alternatives and was a natural approach.

---

TCE, which is a common solvent, was discovered in the groundwater in 1999. The contamination does not present a threat to the public drinking supply.

Although the TCE is in the groundwater beneath the earth's surface, the water naturally flows up to the surface and then flows through the ditch system at a rate of about 225 gallons per minute. Once the water is treated, it is discharged into Three Mile Branch.

TCE was used for asphalt testing from the 1960s through 1985, and it was being discarded in the sewer until the late 1980s, in accordance with the manufacturer's recommendations.

To follow news related to the plume, visit [www.coliseumboulevardplume.com](http://www.coliseumboulevardplume.com).

---