Iowa Department of Public Health
Hazardous Waste Site Health Assessment Program

Rolfe Aboveground Storage Tank (AST) Bulk Petroleum Targeted Brownfields Site

**Highlights:** The Iowa Department of Natural Resources (IDNR) has requested the Iowa Department of Public Health (IDPH) Hazardous Waste Site Health Assessment Program to evaluate future health impacts of possible environmental contaminant exposures at a former AST site located in Rolfe, Iowa. The IDNR has completed a Targeted Brownfields Assessment (TBA) at the site, conducted through the IDNR’s Iowa Brownfield Redevelopment Program, to determine if any soil or groundwater contamination is present at the site. The site was voluntarily selected for a TBA because the City of Rolfe is considering redevelopment of the site as a trailhead for a bike/nature trail, and they want to ensure that there are no adverse environmental risks or liabilities at the site. The consultation concludes that the site poses No Human Health Hazard if used as a public park and trailhead.

**Background**
The Rolfe AST bulk petroleum site is a small (<1 acre) parcel of land located on the south side of Rolfe, Iowa, southwest of the intersection of Railroad Street and 300th Avenue. County assessment records show that the ASTs at the site were constructed in 1936 with one 17,000-gallon fuel tank, three 10,000 gallon tanks, and one 4,000 gallon tank. All tanks are mounted on concrete supports (saddles). The site was most recently operated by Page Oil Company, and has been abandoned since the late 1980s,

**Why was a Health Consultation Written?**
IDNR has requested IDPH to evaluate possible future health impact exposures, related to the results of IDNR’s assessment activities. This health consultation addresses potential health risks to people from future exposure to soil within the property boundary, and any health impacts resulting from contaminated groundwater beneath the site property.

**What are Brownfield Sites?**
Brownfields are abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

**What chemicals were investigated in the Health Consultation?**
In general, two classes of chemicals were looked at: heavy metals and petroleum components. Lead, arsenic, barium, cadmium, and chromium were the heavy metals detected during soil sampling. Benzene, toluene, ethylbenzene and xylene were the petroleum constituents that were found during groundwater sampling.
What were the Conclusions of the Health Consultation?
From evaluating the soil and groundwater sampling data collected during October, November, and December 2004 sampling events; and other background information on the site it is concluded that:

- Human exposure to the soils through incidental ingestion would not be expected to produce any adverse health effects, even to sensitive portions of the human population including children.

- It is anticipated that individuals within Rolfe will not be exposed to any contaminated groundwater, since all residences are supplied with water from the City of Rolfe Public Water Supply. Source wells for the public water supply are far from the site and are regularly monitored for quality.

- The site poses no human health hazard if used as a public park or trailhead.

Were there any Recommendations made in the Health Consultation?
Yes. The following recommendation was made in the Health Consultation:

- Care should be taken in the removal of the remaining aboveground storage tanks and associated structures to ensure that any petroleum products that may have been left within the tanks or associated structures are contained and properly removed prior to razing the site. Confirmatory sampling of the soil may be warranted if petroleum is spilled during site cleanup activities.

Where can I get a copy of the Health Consultation?
The Rolfe AST petroleum bulk plant Health Consultation is available for viewing and printing online at the following web address: [http://www.idph.state.ia.us/eh/toxicology_env_health.asp#waste](http://www.idph.state.ia.us/eh/toxicology_env_health.asp#waste). A copy is available for review at the Rolfe City Hall. You may also request a copy from the staff members listed below.

What if I have additional questions or need more information?
The following Hazardous Waste Site Health Assessment Program Staff are available to answer your questions or provide more information.

Stuart Schmitz, P.E.
Health Assessor
Phone: (515) 281-8707
Email: sschmitz@idph.state.ia.us

Sara Colboth
Health Educator
Phone: (515) 281-5894
Email: scolboth@idph.state.ia.us

Written requests should be made to:
Charles Barton, Ph.D., DABT
Iowa Department of Public Health
321 E. 12th Street
Des Moines, IA 50319-0075