



Summary of Former Nebraska Solvents Company Site Investigation Activities



- The Nebraska Solvents Company (NSC) leased land at 1200 East Highway 30 in Grand Island from Union Pacific Railroad (UPRR) for a solvents storage and distribution company. NSC operated at this site from approximately 1973 until 1987.
- In 2004, the U.S. Environmental Protection Agency (EPA) conducted a file review, which included a 1989 EPA investigation report on the original NSC facility near the Cleburn Street Municipal well. The second site at 1200 East Highway 30 was mentioned in the 1989 report, so the EPA requested NDEQ investigate the Highway 30 site to see if the same contaminants occurred at the second site as had been found at the Cleburn Street site.
- In June and July of 2004, NDEQ conducted a Preliminary Assessment and Site Inspection of contamination at the former facility at 1200 East Highway 30 and east to approximately Shady Bend Road. Chlorinated solvents and aromatic hydrocarbons such as ethylbenzene, vinyl chloride, and tetrachloroethylene (PCE) were found in soil and groundwater at the sites, and low levels of PCE and similar solvents were found in groundwater east of the facility to about Shady Bend Road. No drinking water appeared to be impacted by contaminants above maximum contaminant levels (MCLs) for drinking water because most homes and businesses in this area were provided with Grand Island city water and sewer service.
- Because NSC was no longer a viable company, UPRR, as the landowner, was determined to be the potentially responsible party (PRP). UPRR began its own soil and groundwater investigation in late 2005 and entered the Nebraska Voluntary Cleanup Program (VCP) in 2007. The VCP uses the same cleanup standards as CERCLA (also known as Superfund) but has different reporting requirements and thus lower cleanup costs.
- UPRR continued tracking the PCE plume in groundwater downgradient several miles farther than was originally expected. In April of 2008, UPRR notified NDEQ that the plume had been tracked to past Gunbarrel Road. They found that a subdivision in west Merrick County had numerous homes using private wells. All drinking water wells in this area were tested, and eventually some 26 were found to have PCE above the MCL of 5 ug/l, and 35 wells had PCE or TCE below the MCL.
- UPRR notified the homeowners of the sampling results and supplied bottled water or a whole house granular activated carbon (GAC) treatment system to any resident with detected PCE or TCE. Approximately 49 homes have a GAC system and another 12 or 15 have bottled water. UPRR tests tapwater quarterly to confirm the effectiveness of the GAC treatment system in removing PCE and other solvents.
- The Nebraska Department of Health and Human Services (NDHHS) recommended that water with PCE concentrations above 5 ug/l not be used for drinking and water with concentrations above 17 ug/l not be used for showering. This was later adjusted to 23 ug/l. No homes in this area were found to have PCE in drinking water exceeding this concentration.

- NDEQ held a public information meeting October 21, 2008 focusing on the private well impacts.
- UPRR conducts quarterly sampling of all monitoring wells in addition to quarterly monitoring of the treated water (for homes with GAC systems), untreated water (for homes with bottled water), and water from unimpacted private water wells near the contaminated groundwater plume sampling. In April, 2010 NDEQ conducted a split sampling investigation to verify the quality of UPRR's private well sampling and analysis program.
- UPRR prepared a plan for cleanup of the contaminated soil and groundwater, called the Remedial Action Plan (RAP). Proposed remedial actions include excavation of contaminated soil in the source area; chemically treating groundwater and soil in the source and near-source areas; and using institutional controls to restrict the installation of potable water wells at the former facility and impacted private well area and prohibiting residential land use on-site if residential remediation goals are not achieved. UPRR will also work with the City of Grand Island to extend city water to all homes in the impacted area in western Merrick County, bounded by Gunbarrel Road, Capital Avenue, Beck Road, and Ft. Kearny Road. In addition, UPRR proposes to perform a monitored natural attenuation (MNA) study to evaluate the feasibility of using MNA to allow the remaining solvents to naturally degrade until remediation goals (RGs), as listed in Table 9-1 of the final proposed RAP, are reached.
- NDEQ presented the results of the split sampling investigation and summarized the proposed RAP for the public in a meeting in Grand Island on June 23, 2010.
- After NDEQ comments had been addressed, the final proposed RAP was sent to NDEQ December 21, 2010. NDEQ will public notice a preliminary determination to approve the proposed RAP beginning January 10, 2011 until February 10, 2011. The administrative record, including a copy of the proposed RAP, will be available for inspection at the office of the Nebraska Department of Environmental Quality in Lincoln as well as at the Edith Abbott Memorial Library in Grand Island.
- NDEQ will hold a Public Hearing on February 10, 2011 to allow any interested person to comment on the proposed RAP.