



New Mexico Environment Department

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Ground Water Quality Bureau

Fact Sheet: Calle Chavez Plume in Española, NM (April 2020)

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the New Mexico Environment Department (NMED), with oversight from the United States Environmental Protection Agency (EPA), has been conducting remedial actions at the North Railroad Avenue Plume (NRAP) Superfund Site in Española, Rio Arriba County, New Mexico, since 2005. During implementation of the remedial actions at the NRAP Site, NMED and EPA discovered a second groundwater plume and determined, after further investigation, that the second plume is apart and separate from the NRAP Superfund plume, as explained below.

In 2015, NMED and their environmental services contractor conducted direct-push/hydro-punch groundwater sampling that indicated the presence of elevated chlorinated volatile organic compounds (CVOC) at a shallow monitoring well (depth of approximately 30 feet below ground surface) located on the southeastern margin of the NRAP Site, near Calle Chavez in Española. The CVOC, trichloroethene (TCE), was detected in groundwater samples at concentrations ranging from 28 to 110 µg/L. These concentrations are well above the federal drinking water standard for TCE of 5.0 µg/L.

In 2017 and 2018, EPA completed an investigation that focused on the potential vapor intrusion pathway associated with the NRAP Site, and a vapor intrusion assessment of the new shallow groundwater plume found on the eastern edge of the NRAP Site. Under Phase I of the investigation, EPA conducted an exterior soil vapor (or soil gas) survey in November 2017 to further define the horizontal extent of CVOC contamination associated with the new shallow groundwater plume. In December 2018, EPA also conducted indoor air sampling at two buildings located over the shallow plume area as defined by the 2017 soil gas survey. CVOCs in these samples were detected at concentrations below the residential VI screening levels for indoor air.

In January 2019, NMED and their environmental services contractor drilled four soil borings, installed three shallow groundwater monitoring wells, and sampled groundwater to further evaluate CVOC contamination identified near the eastern edge of the NRAP Site to determine the contaminant source for this new plume. Tetrachloroethene (PCE) and TCE were detected in groundwater samples at concentrations ranging from 1.0 to 160 µg/L and 10 to 380 µg/L, respectively.

Chlorinated solvents have not historically been detected in shallow aquifer monitoring wells that define the eastern edge of the NRAP Site. Furthermore, there are shallow monitoring wells located between the NRAP plume and the new plume with no PCE or TCE contamination, demonstrating the two plumes are not connected.

NMED concludes that groundwater contamination identified beyond the eastern margin of the NRAP Site is attributed to a separate source, and subsequently referred this matter to NMED's state regulatory programs for further investigation and cleanup.

NMED will use its enforcement authority to compel the Responsible Party (RP) to perform further characterization and abatement actions to clean up the new groundwater plume.