

**Square D/Schneider Electric, Peru, Indiana**

Office of Land Quality

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100 N. Senate Ave., Indianapolis, IN 46204

Description:

The Square D Site is a former electrical parts manufacturer located in Peru, Indiana. The facility began operating in 1881. Schneider Electric USA, Inc. (Schneider) acquired Square D in 1991 and the Site continued the manufacture of panel boards at the facility until May 2020, when the facility shut down operations. The primary operation at the Site from 1958 to 2020 was the construction and painting (powder coating and electrostatic coating) of the metal panels. Site hazardous/non-hazardous material usage included aerosols, powder coating, propane tanks, various oils, paints, wastewater treatment chemicals, and various chemicals/additives used in painting. There was a release to the environment of trichloroethylene (TCE) from the Site at an unknown time. TCE was likely used on this Site as part of historic manufacturing processes, degreasing, and metalworking (VFC # 83253226). The use of TCE did not become regulated by the United States Environmental Protection Agency (EPA) until the 1980s.

Background:

In February 2022, the Indiana Department of Environmental Management (IDEM) and Schneider signed a Voluntary Remediation Agreement to conduct investigation and cleanup of the facility's released contamination (VFC # 83285967). Part of the acceptance into the IDEM Voluntary Remediation Program (VRP) included mailing a notification to the Peru Mayor's Office and Miami County Health Department (VFC # 83283079). IDEM approved the submitted plan (VFC # 83353264) to investigate off-Site groundwater contamination in August 2022 (VFC # 83357588). The groundwater investigation is ongoing. Schneider and their environmental consultant, ERM, an independent international consulting firm, attempted to gain access to an adjacent residence in June 2022 to determine if indoor air is being impacted by vapors. After access was denied, IDEM wrote a letter in September 2022 requesting access (VFC # 83367825), which was subsequently granted. IDEM approved the submitted continuation and expansion of investigations (VFC # 83389324) in December 2022 (VFC # 83401715). Part of this approved investigation included the expansion of indoor air investigations to nine additional residences. These residences were mailed access request letters from ERM in early January 2023 (VFC # 83412683).

Upcoming Planned Investigations (VFC # 83389324):

- All investigations will be conducted by the environmental consulting firm ERM hired by Schneider to complete the investigative and remedial work. Under IDEM's oversight, ERM will continue to submit reports for IDEM review and approval. All environmental samples are sent to independent EPA-approved laboratories.
- Indoor air sampling. Homes identified for indoor air sampling will be investigated as access is granted from homeowners. IDEM encourages homeowners that are contacted to grant access for indoor air sampling.
- Sewer sampling. Sewer investigation is ongoing and will be conducted based on IDEM's R2 (Risk-Based Closure Guide) guidance.
- Further off-Site investigations. Groundwater sampling, soil investigation, and bedrock investigation as approved by IDEM will proceed.
- Submittal of Site Investigation Report Addendum #2. This report will summarize the results of the investigation work completed. IDEM has required this submittal on or before April 7, 2023 (VFC # 83412683).

- To access the Square D Site's reports and IDEM comment letters, type the following address into your browser: <http://vfc.idem.in.gov/>. Then, under "Alternate Field" select "Land Site ID" and enter the Square D Site identification number "6211202". Click the "I'm not a robot" box. Click the "Search" button. This Virtual File Cabinet (VFC) will be updated with all submittals from ERM and all IDEM comment letters.
- To access the document numbers (VFC #) referenced in this fact sheet, under the VFC "Alternate Field" select "Document ID" and enter the referenced number. All referenced documents are discoverable by entering the site information as explained above.
- Investigation of TCE contamination must proceed until IDEM approves its completion. Once IDEM approves completion of all investigations, ERM will have 60 days to submit a Remediation Work Plan to IDEM. This document will explain how ERM will address the contamination. For approval of a Remediation Work Plan, IDEM requires a 30-day public comment period. Properties impacted by the contamination will be notified of this public comment period and can make comments to IDEM or request a public hearing, as required by Indiana state law (IC 13-25-5-11).

Environmental and Health Impacts:

- Based on investigation data collected to date, off-Site contamination appears to be limited to groundwater impacts identified near the intersection of E. Ninth Street and N. Water Street, located southeast of the Site, in the southeast down gradient flow direction of groundwater. As investigations continue, the understanding of off-Site contamination locations will be expanded.
- The schools located to the west of the facility are unaffected.
- A person can be exposed to TCE by:
 - Touching soil containing TCE,
 - Drinking water containing TCE, and
 - Breathing air containing TCE.
- Touching soil. TCE is detected at depths between 15 and 22 feet below the ground surface. Soil contamination only occurs on the Square D property. Soil in the surrounding residential communities is safe for all activities, including gardening.
- Drinking water. Water is supplied to the surrounding residential communities by the City of Peru, therefore no drinking water is impacted. For residences in the identified area with a potable well on their property, please contact ERM or IDEM for well water sampling.
- Breathing air. To understand if TCE vapor is present in a structure, environmental professionals must be granted access for sampling by the property owner. IDEM always requests samples of gas beneath the building and inside of it. Without access to sample, it cannot be verified if vapors are present inside of a home.
- Further vapor explanation. Over 100 vapor samples have been collected as part of the preliminary soil gas investigation. TCE has been detected from 5.5 feet to 11 feet below ground surface, which warranted the expansion of investigations to the air inside homes. When chemicals evaporate from soil and groundwater, the gas (vapor) moves through soil and can accumulate beneath buildings and sewer lines. Vapors can enter buildings and sewer lines through cracks and unsealed seams.
- Vapor mitigation. If a building has elevated levels of TCE verified by sampling, IDEM will require the installation of a vapor mitigation system, which is similar to a radon remediation system. The installation and testing are paid for by Schneider Electric and occurs at no cost to the homeowner. Additional measures may be taken to reduce or eliminate the source to reduce the risk of exposure.
- Vapor sampling and vapor mitigation fact sheets are attached to this document.
- Health impacts and published levels.
 - IDEM's published levels provide target numbers for contaminant exposure, including TCE levels.
 - Published levels are conservatively developed by the EPA to protect the most vulnerable populations, including children, the elderly, and immunocompromised individuals.

- Exceedance of an IDEM published level does not necessarily mean a health risk has been incurred since the formula uses very conservative exposure scenarios. The assessment of a health impact due to TCE exposure must be conducted by a physician or toxicologist.
- Potential health impacts from TCE exposure depend on how much, how long, how often, and in what way(s) a person is exposed. Discussions regarding personal health should occur with a physician.

IDEM's Role:

- IDEM is responsible for protecting human health and the environment and has the jurisdiction to require and/or complete investigation and cleanup of contaminated soils, indoor air vapors, and groundwater.
- IDEM will enforce its stringent standards for the investigation and remediation of all known contamination.
- IDEM will review, provide comments, approve, and ensure the implementation of investigations. IDEM will provide feedback and oversight on the remediation of all contamination impacting the surrounding properties. IDEM will not grant closure to a Site until verification sampling has reached the approved objectives and all IDEM requirements have been met.

Additional Information:

- All reports and correspondence are publicly available in IDEM's Virtual File Cabinet. Access instructions have been provided in the "Upcoming Planned Investigations" section.
- For more information, questions, or concerns related to the Square D Site, please contact IDEM's VRP Project Manager for this Site, Chelsea Day, at (317) 232-8517 or by email at CNDay@idem.in.gov or Bill Holland, Section Chief of VRP, at (317) 234-0967 or by email at BHolland@idem.in.gov.

Attachments:

- TCE fact sheet: https://www.in.gov/idem/files/factsheet_olq_remediation_trichloroethylene.pdf
- CDC public health statement regarding TCE: <https://www.cdc.gov/TSP/PHS/PHS.aspx?phsid=171&toxid=30>
- Vapor intrusion fact sheet: <https://www.in.gov/idem/cleanups/investigation-and-cleanup-programs/vapor-intrusion/>
- Vapor intrusion sampling fact sheet: https://www.in.gov/idem/files/factsheet_olq_remediation_vapor_intrusion_sampling.pdf
- Vapor mitigation fact sheet: can be found at the following link: <https://www.in.gov/idem/fact-sheets/>. Scroll down to "Remediation and Response" and select "Vapor Mitigation."
- IDEM R2 (Risk-Based Closure Guide): https://www.in.gov/idem/files/nrpd_waste-0046-r2.pdf
- Voluntary Remediation Program (VRP) Program Guide: https://www.in.gov/idem/files/nrpd_waste-0077_attach.pdf