SHILOH CHURCH ROAD SITE
SPECIAL BULLETIN A
NOTICE OF $250K ACTIVATION FOR REMOVAL RESPONSE ACTION

INTERSECTION OF LP BAILEY MEMORIAL HIGHWAY & SHILOH CHURCH ROAD
NATHALIE, HALIFAX COUNTY, VA 24577
EVENT: EMERGENCY RESPONSE ACTION
ATTN: RRC, F. BURNS, B. GROSS

I. BACKGROUND AND SITUATION (6/25/18)

A. In April of 2018, representatives from the Virginia Department of Environmental Quality (VDEQ) requested EPA assistance to perform an expanded Site assessment in an area near the intersection of LP Bailey Highway and Shiloh Church Road in Nathalie, Halifax County, Virginia. The area, hereinafter known as the Shiloh Church Road Site (Site), consists of two property parcels which are owned by a private individual. The properties were historically used as a former scrap metal yard and convenience store. However, these businesses ceased operations in the mid-2000s.

B. EPA and VDEQ contacted representatives from Halifax County, the Virginia Department of Health (VDH), and the Virginia Department of Emergency Management (VDEM). A Unified Command was established. Unified Command developed a plan of action which included sampling of the residences in the area near the Site. All residents in this area utilize private wells for drinking water.

II. CURRENT ACTIONS

A. On April 27, 2018, EPA resampled a residential well where tetrachloroethylene (also known as tetrachloroethene or perchloroethylene) was previously detected in a concentration twice above the EPA Maximum Contaminant Level (MCL). This information was obtained from the contractor who performed the environmental assessment. EPA's result was consistent with the previous result, but below the EPA Risk Screening levels for immediate action.

B. During the week of May 14, 2018, EPA and the Virginia Department of Health (VDH) reached out to additional residents who live near the Site. EPA's contractor collected samples from eleven residential properties. The sampling team also interviewed the residents regarding the depth and condition (if known) of their wells. Samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds, metals, and PCBs.

C. The OSC has received preliminary data from the May sampling event. The data indicates the presence of trichloroethylene, a hazardous substance, in two residential wells in concentrations above EPA's Superfund Removal Screening Levels (RSLs) for a removal action.

EPA's screening levels are used as a guide for cleanup goals. Once more information is obtained about Site conditions, the OSC will request the assistance of a toxicologist who can perform a more detailed analysis based upon all data from the Site. However, since the Site has not yet been fully characterized, this funding request applies only to the drinking water wells that indicate the presence of hazardous substances in concentrations greater than Superfund RSL levels for a removal action.

D. Other hazardous substances have already been identified at the Site. However, based on preliminary information, EPA cannot ascertain whether the well contamination originated from the Site. Other well samples collected closer to the Site contained significantly lower concentrations of hazardous substances.

E. Trichloroethylene, also known as trichloroethene or TCE, is a colorless volatile liquid used primarily as a degreasing agent. The National Toxicology Program has determined that trichloroethylene is a "known human carcinogen". The EPA and the International Agency for Research on Cancer have determined that trichloroethylene is "carcinogenic to humans" ((ATSDR), 2016). Trichloroethylene is a listed hazardous substance as identified in 40 CFR 302.4.

F. Based on the information above, on 6/25/18, the OSC made the determination that immediate response actions are needed to provide and install granular activated carbon (GAC) filters to reduce the risk to human health due to the presence of trichloroethylene in two private drinking water wells.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT

A. The National Contingency Plan 40 CFR 300.415(b)(2) requires the lead agency consider the following factors in determining the appropriateness of a removal action:

(ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

Trichloroethylene, a listed hazardous substance, has been detected in two residential drinking water wells at levels significantly above the EPA's carcinogenic risk screening level for a removal action (10-4) of 49 micrograms/liter. Immediate action is needed to minimize the concentration of TCE in these drinking water wells.

There is strong evidence that trichloroethylene can cause kidney cancer in people and some evidence for trichloroethylene-induced liver cancer and malignant lymphoma. Lifetime exposure to trichloroethylene resulted in increased liver cancer in mice and increased kidney cancer and testicular cancer in rats. The National Toxicology Program (NTP) has determined that trichloroethylene is a "known human carcinogen". The EPA and the International

Agency for Research on Cancer (IARC) have determined that trichloroethylene is "carcinogenic to humans."

Trichloroethylene was discovered in two drinking water wells at levels more than twice the EPA Removal Screening Level of 49 micrograms/liter for carcinogenic risk. At the time of this document, only draft data is available. However, the OSC will cancel the proposed action if validated data indicates the levels of TCE are below the EPA Removal RSL of 49 micrograms/liter.

(vii) The availability of other appropriate federal or state response mechanisms to respond to the release;

VDEQ and VDH contacted EPA for assistance because they do not have the immediate resources available to mitigate the imminent threat to public health, welfare, or the environment. A potentially responsible party has not been identified at this time. To the OSC's knowledge, the current owner did not operate the salvage yard or the convenience store.

IV. OSC ENDANGERMENT DETERMINATION

A. Based on an onsite assessment performed by the OSC, the OSC has determined that conditions at the Site meet the pose an imminent and substantial threat to public health, welfare, and the environment due to the elevated levels of hazardous substances into drinking water wells. Under Delegation of Authority 14-2 of CERCLA, the OSC is initiating a removal action and is initiating funds of $250,000 to begin response actions to mitigate the threat posed by elevated levels of trichloroethylene in two residential wells. This removal action is consistent with the requirements of 40 CFR 300.415b(1).

V. PLANNED RESPONSE ACTIONS

A. Based on the OSC's assessment, the following actions are necessary to mitigate the imminent and substantial threat posed by the uncontrolled release of hazardous substances:

1. Immediately provide bottled water to two residences until the actions listed below can be implemented;
2. Immediately provide and install whole house granulated activated charcoal (GAC) filter systems to reduce the levels of trichloroethylene entering the residential water dispensing points. At this time, units will be installed only at properties where TCE has been identified above EPA

Superfund Removal Risk Screening level for carcinogenic compounds (49 µg/l for TCE).

3. Perform monthly sampling for a period of 6 months to determine the longevity of the carbon. Continue to provide replacement filter media during this time.
4. After six months, EPA will have enough information to advise the residents of the frequency needed to change the filter media. At this time, EPA will transfer the responsibility for replacing the filter media to the affected residents

VI. ESTIMATED COSTS

ERRS:	$ 100,000
START:	$ 70,000
CONTINGENCY:	$ 80,000
	$ 250,000

VII. FUTURE ACTIONS

A. EPA and VDH will meet with the affected residents on 6/27/18 to inform them of their results and collect additional information about the household members using the water.

B. EPA will move forward with the removal assessment of the Site to identify the presence of additional hazardous substances. A preliminary walkthrough has already identified the presence of low-level radiation in isolated discrete areas of the Site. Also, the Phase II assessment identifies the presence of other hazardous substances not addressed in this funding request.

C. EPA will continue actions to identify the source, nature, and extent of trichloroethylene contamination.

C. The OSC will continue to work with EPA Civil Investigators to help identify a potentially responsible party(s) for the Site.

D. The OSC will coordinate with the EPA communications team to ensure factual information is provided on a timely basis.

VIII. KEY ISSUES

A. The source, nature, and extent of contamination have not yet been identified. The purpose of this initial response action is to provide protective measures until the extent of contamination can be established.

B. A potentially responsible party(s) has not yet been identified. To EPA's knowledge, the properties which constitute the "Site" were not used to produce or store trichloroethylene.

C. EPA, along with Unified Command, will identify other possible residential properties where sampling may be necessary.

IX. ADMINISTRATIVE RECORD

A. The following documents were used to make the determination above and constitute the Administrative Record for the Site in accordance with 40 CFR 300.810.

1. Criteria for consideration for removal action 40 CFR 300.415b(2)
2. 40 CFR 302.4(a) and table page for "trichloroethylene"
3. Preliminary data identifying elevated levels of trichloroethylene.
4. Hurt & Proffitt Phase II Environmental Assessment Report
5. EPA National Primary Drinking Water Regulations Table of Maximum Contaminant Levels
6. Agency for Toxic Substances and Disease Registry ToxFAQs, TRICHLOROETHYLENE.
7. Regional Removal Management Level (RML) Resident Tapwater Table (TR=1E-04, HQ=3) May 2018
8. Pollution Report #1

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