

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Bond Street Contaminated Well Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #3
Time Critical Removal Action Pollution Report
Bond Street Contaminated Well Site
B4Y1
Raleigh, NC
Latitude: 35.8031850 Longitude: -78.5781030

To:
From: Kenneth Rhame, On Scene Coordinator
Date: 6/20/2016
Reporting Period: February 2016 to June 2016

1. Introduction

1.1 Background

Site Number:	B4Y1	Contract Number:	
D.O. Number:		Action Memo Date:	4/20/2016
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	12/7/2012	Start Date:	12/7/2012
Demob Date:		Completion Date:	
CERCLIS ID:	NCN000410936	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time Critical Removal Action

1.1.2 Site Description

The Site is a residential neighborhood that has several private residential drinking water wells that have been contaminated with pesticides and chlorinated solvents; chlordane, dieldrin, heptachlor epoxide and tetrachloroethylene (PCE). There are no known sources of the contamination at this time. The Bond Street Contaminated Well Site neighborhood is in close proximity to the intersection of Trawick Road and Bond Street. This area is not in the City of Raleigh city limits. It is considered a "Donut Hole" where the city has grown around this neighborhood and not annexed this area; thus waterlines has not been extended to this neighborhood.

1.1.2.1 Location

Bond Street Contaminated Well Site, Raleigh, Wake County, North Carolina. The Bond Street Contaminated Well Site neighborhood is in close proximity to the intersection of Trawick Road and Bond Street. This area is not in the City of Raleigh city limits. It is considered a "Donut Hole" where the city has grown around this neighborhood and not annexed this area; thus waterlines have not been extended to this neighborhood. The Source of the contamination is unknown.

1.1.2.2 Description of Threat

There is documented evidence of drinking water wells that have been impacted at the Site with concentrations of chlordane, dieldrin, heptachlor epoxide and PCE that exceed RMLs and/or MCLs.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In December, 2012 the U.S. Environmental Protection Agency Region 4, Superfund Division, Emergency Response, Removal and Prevention Branch received a request from the Wake County Environmental Services program, to conduct a Removal Site Evaluation (RSE) at the Bond Street Contaminated Well Site. Wake County discovered chlordane and dieldrin at the Bond Street Contaminated Well Site in residential wells that exceed the Removal Management Levels (RML's). U.S. EPA received access agreements and initiated residential well sampling in Bond Street Contaminated

Well Site community in Raleigh, NC in December, 2012. The Removal Management Level (RML) for chlordane is 3.8 ug/L, dieldrin is 0.17 ug/L and heptachlor epoxide is 0.14 ug/L. The Maximum Contaminant Level (MCL) for chlordane is 2.00 ug/L, dieldrin does not have a MCL and the MCL for heptachlor epoxide is 0.2 ug/L. During the Removal Site Evaluation in December of 2012, EPA sampled twelve wells; three wells exceeded the RML for dieldrin (0.382 ug/L, 0.179 ug/L, and 0.6 ug/L). One well exceeded the RML for heptachlor epoxide, 0.18 ug/L and one well exceeded the MCL for chlordane, 3.06 ug/L. In summary, five well samples exceeded a RML or MCL. Upon completing the RSE, which involved interviewing residents, assessing the location of the wells in relation to the foundation of the homes, reviewing data and considering the time of construction of both the homes and the wells (constructed in 1960s), EPA concluded that the contamination was likely introduced by the homeowners themselves or by the builder via termite treatment; thus did not conduct a removal action in 2012 based on the evidence supporting contamination present as a result of proper pesticide application. Residents were provided with the EPA sampling results and appropriate recommendations were provided with these results. The Site was then referred back to the North Carolina Department of Natural Resources (DENR) Aquifer Protection Section (APS) and Wake County Environmental Services.

North Carolina DENR (now DEQ) collected additional samples and provided either filters or public water connections to four homes that met the criteria for assistance using Bernard Allen Drinking Water Fund; a program that provides assistance to low-income households needing assistance to deal with contaminated groundwater. Several households did not meet the criteria for assistance from the Bernard Allen Drinking Water Fund.

In February of 2016 EPA discussed re-evaluating the Site as a potential time-critical removal candidate based on new information provided by Wake County Environmental Services. A home and residential well that was constructed in 2003, sampled by NC DENR had dieldrin concentrations documented at 0.04 ug/L and tetrachloroethylene (PCE) at 0.54 ug/L; the neighboring property has a concentration of 4.9 ug/L PCE, right at the MCL of 5 ug/L.

There are currently five homes that exceed the RML/MCL that have not been provided a municipal connection or a filtration system. There are approximately 273 homes in the "Donut Hole" in the vicinity of the Bond Street neighborhood; 133 homes in the Donut Hole have not yet been sampled due to lack of property access that need to be assessed. After a review of Site conditions, the Emergency Response, Removal and Prevention Branch (ERRPB) concluded that the Site meets the criteria as set forth in 40 CFR 300.415(b)(2) for a time-critical removal action.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

In 2009, prior to initial discovery of well contamination by Wake County and prior to the Removal Site Evaluation, the City of Raleigh attempted to annex a portion of the Bond Street neighborhood; the residents were successful preventing annexation. The North Carolina Department of Environmental Quality, Water Resources program, has provided municipal connections and/or filters to four homes that met the criteria for Bernard Allen Drinking Water assistance.

EPA will continue to seek access from surrounding residents in order to sample the drinking water wells in the neighborhood. Homes that are identified through these sampling efforts that exceed the EPA MCLs or RMLs will be offered a filtration system.

2.1.2 Response Actions to Date

Of the five affected homes, EPA has installed water filters on two homes on Bond Street. One home on Bond Street has installed their own filter and EPA has sampled that home's well water and inspected the configuration of the filtration system to insure that it is functioning properly and will upgrade configuration as appropriate. One affected home is vacant, owner is deceased, efforts getting access for this home is ongoing. One home owner on Melrose installed their own filtration unit; EPA sampled the well water at this home to insure that it was functioning properly, EPA also offered to inspect the filter configuration and the owners denied the offer.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

A Responsible Party has not yet been identified.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

EPA will continue to work with Wake County Environmental Services to gain access and sample wells in the neighborhood.

Homes identified that have contaminant concentrations exceeding MCLs or RMLs will be offered a filtration system.

2.2.1.1 Planned Response Activities

Obtain access agreements from residents and sample wells throughout the neighborhood.

2.2.1.2 Next Steps

2.2.2 Issues

This area is not in the City of Raleigh city limits. It is considered a "Donut Hole" where the city has grown around this neighborhood and not annexed this area; thus waterlines and city sewer has not been extended and provided.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.