STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WASTE MANAGEMENT
HAZARDOUS WASTE SECTION

SAMPLING EVENT REPORT

Subject:	**BEST SAND & GRAVEL Inc.** **BEST CONTRACTING Inc.**
EPA ID Number:	**NCS000002249**
Date:	**October 27 & 28, 2015**
Report By:	William Hunneke **No:** 060
Location/ **Mailing Address:**	117 Best Sand & Gravel Rd, Goldsboro NC 27577 2390 Highway 111 South Goldsboro NC 27534 Wayne County
Contact Person: **Telephone Number:**	Thomas G. Best, President 919 778-3252 -office- 919 750-4001 -mobile-
Participants:	
Representing EPA Region 4	Mr. José Negron, On-Scene Coordinator (OSC)
Representing Tetra Tech:	Chris Draper, START IV Site Manager
Representing NCDEQ:	William Hunneke and Harvi Cooper
Reason for visit:	Focused Sampling Event - **SPL**

Background/Site Description:
The Site is located on 2.83 acres of land on Best Sand and Gravel Road, Goldsboro, Wayne County, North Carolina. The geographic coordinates of the Site are 35.301922° North and 77.936587° West. The Site is bordered by wooded and rural lands.

Mr. Thomas Best, owner of the property located at 117 Best Sand and Gravel Road, Goldsboro, NC entered into the NC Superfund Section's Inactive Hazardous Sites Branch Registered Environmental Consultant (REC) Administrative Agreement in 2008 for the voluntarily assessment and remediation of groundwater contaminated with trichloroethene (TCE) and tetrachloroethene (PCE).

According to previous assessment information related to the site, the dissolved contaminant plume was discovered in July 1995 and was the result of release(s) of chlorinated solvents used for cleaning excavation equipment in and around the mechanical shop. Sampling conducted in 2008 at the subject property indicated the groundwater in the immediate vicinity of the former mechanical and welding shops was the most contaminated with TCE and PCE at concentrations up to 12,000 micrograms per liter (µg/L) and trichloroethylene (TCE) up to 91 µg/L. There is one residence, a hunting lodge and a truck washing facility in close proximity to the Site, but they are all located up gradient from the Site.

The REC Administrative Agreement was terminated on April 26, 2010 by Mr. Thomas Best. The groundwater contamination at this site had not been further assessed on the property until this sampling event nor had any remediation occurred since this time.

A Site visit was conducted by the EPA OSC Jose Negron and Tetra Tech START on July 7, 2015. The purpose of the visit was to observe Site conditions and meet with Mr. Bill Hunneke of NCDEQ's Division of Waste Management, and Mr. Best. A second meeting was held on the same day with Mr. Jim Lynch at the offices of Maxwell Foods LLC in Goldsboro. During the Site visit, personnel observed a pit measuring 0.99-acre in size and approximately 10 feet deep that had been excavated at the Site. Two piles of excavated sand were observed in the pit, each measuring approximately 50 to 75 cubic yards in size. A small tri-lobed pool of water approximately seventy-five feet across was observed in the pit where groundwater had been encountered. Reportedly, there were 19 monitoring wells associated with the Site, including six wells located on the hunting camp property owned by Maxwell Foods LLC and held by G&L Grain LLC (both subsidiaries of Goldsboro Milling Company), which is located adjacent to the southern and eastern boundaries of the Site.

Removal Site Evaluation (RSE):

The U.S. Environmental Protection Agency's Emergency Response, Removal and Prevention Branch (ERRPB) conducted a Removal Site Evaluation (RSE) at the above referenced Site for potential removal action eligibility under the National Contingency Plan (NCP). On October 27, 2015, the EPA and Tetra Tech START initiated a RSE. NCDEQ's Division of Waste Management representatives, Mr. Bill Hunneke and Ms. Harvi Cooper, were present to answer questions and assist as needed throughout the majority of the RSE activities. All samples collected during this RSE were submitted for laboratory analysis to Shealy Environmental Services, Inc. Based on previous Site data and the contaminants of concern, all samples were analyzed for volatile organic compounds (VOC) using EPA Method 8260B. A global positioning system (GPS) unit was utilized to document Site features and sampling locations, including the excavated pit, the two sand piles, the area of accumulated groundwater within the excavated pit, the soil boring locations, monitoring wells which could be located and the location of the percolated groundwater sample.

DPT Drilling and Subsurface Soil Sampling:
Sample locations were selected based on those proposed in the Tetra Tech Sampling and Analysis Plan (SAP)/Quality Assurance Project Plan (QAPP) with necessary adjustments made in the field based on Site topography and accessibility. A total of 21 soil borings were advanced, including one at the background location. Total boring depths ranged from 5 to 15 feet below ground surface.

Soil Sampling Results:
A total of 20 direct push technology borings were collected at the Site. One additional boring was collected from a background location up gradient from the Site. Based on historically reported groundwater flow modeling and groundwater sampling data from a previous assessment conducted by Mid-Atlantic Associated in 2008, boring depths ranged from 5 to 15 feet below ground surface depending on the location of the sampling point (inside the pit or outside the pit). Soil cores were screened for VOCs with a photoionization detector (PID). Samples were collected and submitted for laboratory analysis. All analytes were below their respective EPA Removal Management Levels for industrial soils.

Sand Stockpiles Sampling Results:
Four samples were collected from each of the two sand stockpiles. Samples collected were screened for VOCs with a photoionization detector (PID). Samples were collected and submitted for laboratory analysis. All analytes from the sand piles were found to be below their respective EPA Removal Management Levels for industrial soils.

Groundwater Sampling Results:
Although the historical data reviewed indicates the presence of 19 monitoring wells installed at the Site, the EPA was only able to locate 17 and collected groundwater samples from nine of those wells. Eight wells were not sampled based on historic groundwater flow and because they were located in close

proximity to at least one of the nine wells sampled in this RSE. PCE was identified by laboratory analysis to be at concentrations above their respective EPA Maximum Contaminant Level of 5µg/L in samples collected from wells MW-7; MW-8; MW-9; MW-11; and MW-13. TCE was identified by laboratory analysis to be at concentrations above EPA Maximum Contaminant Level of 5µg/L in well MW-8.

Monitoring Well ID	**PCE**	**TCE**
	EPA MCL 5µg/L	EPA MCL 5µg/L
MW-7	76	
MW-8	1300	63
MW-9	37	4.5
MW-11	1000	
MW-11 (DUP)	1200	
MW-13	120	

When compared to sampling data from the CSA conducted by Mid-Atlantic Associates in 2008, results from this RSE appear to indicate that:

1. Groundwater contamination appears to be moving south towards the property owned by Maxwell Foods LLC. If the current trend continues, groundwater contamination may migrate into the Neuse River.
2. Sampling results indicate that natural attenuation of PCE and TCE may be occurring. This attenuation could be partially induced by the opening of the pit that allows PCE and TCE to evaporate.

Recommendations:
Based on the results from this sampling and information collected during the RSE, and that there are no residences that utilize groundwater, the OSC recommends this Site be given a no further action for removal eligibility under the EPA's Superfund Removal Program. The program does not recommend a removal action at this time.

The EPA does recommend that NCDEQ works with the current property owner to install an air sparging system to improve attenuation and reductions of groundwater levels of PCE and TCE.

William F. Hunneke

William Hunneke
Eastern Region Compliance Supervisor, NCDEQ

September 13, 2016
Date

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