

May 4, 2012



Mr. Matthew Hubicki
Environmental Engineer I
DER, Bureau C
New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, NY 12233-7014

Subject: Work Plan to Install Upgradient Wells
Hangar D1 Bay 1B Project at the Westchester County Airport
White Plains, New York

Dear Mr. Hubicki:

We want to thank you for meeting with us in January and pursuant to our meeting, ExxonMobil is planning to implement the following work scope to investigate possible sources of chlorinated solvents that are upgradient to Hangar D1 Bay 1B at the Westchester County Airport. A Site Plan is included as Figure 1.

1.0 BACKGROUND

In accordance with the Record of Decision for the Hangar D1 Bay 1B site, soil vapor extraction (SVE) was selected as the remedial alternative for chlorinated Volatile Organic Compounds (VOCs) found in soils and in-situ oxidation using potassium permanganate was selected as the remedial alternative for VOCs in ground water.

In 2004, a SVE system was installed and started-up to remediate impacted soils above the water table where they were found in the vicinity of well MW-02. Initial removal rates were 2.5 pounds of VOCs per year; presently, the system is removing less than 0.4 pounds of VOCs per year.

In August 2001 and September 2004, Potassium Permanganate was applied to the subsurface beneath Hangar D1 Bay 1B near monitoring wells MW-01 and MW-02 (see Figure 1). Results from samples collected three months after each injection indicated a rebound of contaminant concentrations in the MW-01 area. In November and December 2008, a third application of Potassium Permanganate was applied to the subsurface near monitoring well MW-01, and a subsurface investigation was conducted to discern the source of impact near well MW-01. Again, ground water samples collected after injection showed that contaminant concentrations in the MW-01 area rebounded, and long term concentrations remain stable.

For the 2008 investigation in the MW-01 area, total VOCs in soil samples were minimal, ranging from an estimated value of 2.7 micrograms per kilogram (ug/kg) to below method detection limits. However, the highest concentration of Tetrachloroethene and the second highest concentration of 1,1,1-Trichloroethane in ground water were detected in the new upgradient well MW-13 along the northwest hangar wall (refer to Figure 1). Concentrations of Tetrachloroethene degradation products, including Trichloroethene, 1,1-Dichloroethene, cis- and trans-1,2-Dichloroethene, and Vinyl Chloride, were found at the highest concentrations in wells downgradient from well MW-13.

Research for potential upgradient sources, including extensive documentation obtained under Freedom of Information Law (FOIL) requests, revealed a Former Air National Guard (ANG) Septic Area that is reported to be impacted with Tetrachloroethene. Ongoing investigation at the ANG facility (Site V-00499-3)



documented Tetrachloroethene and its breakdown products in the deep overburden and shallow bedrock ground water, located approximately 1,500 feet northwest (upgradient) from Hangar D.

ExxonMobil contacted Westchester County Airport regarding these findings and to request installation of intervening bedrock well clusters between Hangar D and the ANG facility. The Airport responded that they did not believe the ground water concentrations in the MW-01 area were explained by an upgradient source.

On March 30, 2011, ExxonMobil met with the NYSDEC to review its findings and the site status. At that meeting, ExxonMobil agreed to provide a work plan and install wells to expedite the needed project documentation. A work plan to install two well couplets upgradient of Hangar D was submitted to the NYSDEC on April 21, 2011 and the work plan was approved on April 22, 2011. Wells MW-15S, MW-16, MW-17S and MW-18 were installed between June 1 and June 14, 2011 and were incorporated into the quarterly monitoring program for Hangar D1 Bay 1B.

Ground water results show an initial indication of target compounds in the newly installed upgradient wells. As was observed when performing remedial applications in Hangar D1 Bay 1B, the aquifer takes a significant amount of time to restabilize; thus, compound concentrations in the new wells at or below detection and a gradual increase are anticipated in future sampling events.

On December 2, 2011, the NYSDEC issued a letter proposing a meeting in January 2012 with ExxonMobil, Westchester County Airport, and Westchester County Department of Transportation representatives to discuss site specific needs for the Hangar D1, Bay 1B site (Site No. 360037) and other (Voluntary Cleanup Program) sites at the Airport. The meeting was held at NYSDEC offices in Albany on January 19, 2012. At that meeting, ExxonMobil agreed to provide the Work Plan herein to install wells at Hangar D1 Bay 1A which is situated between Bay 1B and wells MW-15S, MW-16, MW-17S and MW-18 (refer to Figure 1).

2.0 PROPOSED ACTIVITIES

Upon notice from the NYSDEC that this work scope is approved, ExxonMobil and its contractors will coordinate the field schedule with Westchester County Airport and will advance up to six soil borings by Geoprobe® in Hangar D1 Bay 1A as shown on Figure 1.

The concrete hangar floor will be cored at each location and investigated with a hand-auger to ensure the location is clear of utilities. Soil borings will then be advanced from the ground surface to refusal at each cored location. Continuous soil samples will be collected in acetate sleeves, visually classified, and screened for VOCs using a photoionization detector (PID). One soil sample will be collected from each boring location at the depth with the highest PID reading, or from the bottom of the boring, for laboratory analysis of VOCs. A 2-inch PVC well will be completed within each bore hole. Ground water samples will then be collected from each well for VOC analysis. *(Note: Ground water sampling may be conducted in coordination with the next quarterly monitoring event. Wells will be developed by simple pumping methods with no addition of water to the formation.)* All site ground water monitoring wells will be gauged to develop a ground water contour plan across the two hangar bays. Soil and ground water samples will be submitted to TestAmerica Laboratories, Inc. of Nashville, Tennessee.

3.0 SCHEDULE AND REPORTING

Well installation activities will be conducted as soon as possible upon approval to proceed from the NYSDEC and Westchester County Airport. Installation activities and ground water monitoring results will be reported in quarterly progress reports submitted for the Hangar D1 Bay 1B site.



Please do not hesitate to contact me at (203) 271-0379 with if you need any additional information to facilitate your review and approval of this Work Plan. Thank you again for your time and assistance.

Sincerely,

WOODARD & CURRAN INC.

Anne E. Proctor, PE
Principal Project Manager

Attachment: Figure 1

copy: M. Lamarre, K. Drake – ExxonMobil
M. Hubicki – NYSDEC (repository copy)
N. Walz – NYSDOH (electronic copy only)
M. Parletta - Westchester County Airport
E. Faulkner, R. Martinez - Landmark Aviation
M. DeGloria - GES

