FIRST ENVIRONMENT

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May 22, 2000

Mr. Peter Scherrer
Assistant Airport Manager
Westchester County Airport
240 Airport Road, Suite 202
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Re: Aircraft Rescue and Firefighting Training Pit
Phase II Investigations and Proposed Workplan Spill #99-1702

In response to your request, the following will summarize the site investigation activities that have been performed to date in the Aircraft Rescue and Firefighting Training Pit (ARFF) as well as the proposed investigation / remediation activities that will be performed to close this spill to the satisfaction of the New York State Department of Environmental Conservation (NYSDEC). The initial Work Plan for the ARFF was submitted, by you, to the NYSDEC on April 3, 2000. The Department reviewed the Work Plan, provided comments and requested that the Work Plan be resubmitted. Responses to the NYSDEC's comments are included in the discussion below.

PREVIOUS INVESTIGATIONS

During a detailed site reconnaissance in approximately October 1999, a burn pit was identified west of Building 10. Reportedly periodic training activities have been conducted in this area for the past 20 years. These activities were initially conducted by the Air National Guard, and are now periodically conducted by Airport personnel to train its Fire Crew.

As a result of historical firefighting activities, concerns were raised regarding the potential environmental impacts to soil and groundwater at this location. Therefore, on December 22 1999, First Environment conducted eight soil borings (B-1 through B-8) and installed two temporary monitoring wells, from which groundwater samples were collected in an effort to evaluate the area. Soil samples collected at B-5 and B-7 were screened using a photo-ionization detector (PID) and revealed elevated concentrations of volatile organic compounds (VOCs); specifically 17 ppm and 225 ppm, respectively. In addition, the soil at each of these locations exhibited petroleum staining and/or odors. The soil samples collected from the remaining six borings did not indicate PID readings above background, although some minor soil discoloration was observed. The soil samples containing the highest PID measurements at B-5 and B-7 were submitted to a

certified New York State laboratory for analysis for semi-volatile organic compounds (SVOC) and VOCs.

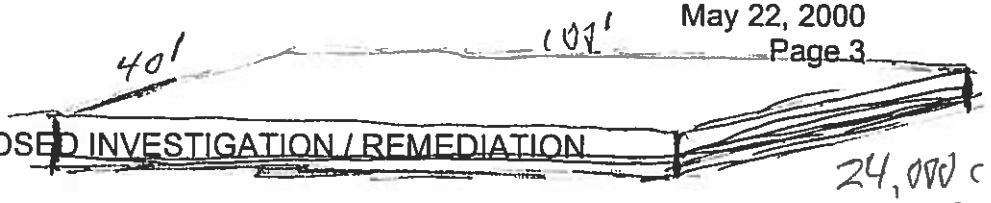
In addition, two temporary wells were installed at B-5 and B-7 to evaluate the water quality at each location. Groundwater samples collected at both locations revealed concentrations of VOC and SVOC concentrations above the New York State TOGs standards. The locations of the soil borings and temporary monitoring wells are presented in Figure 1. Soil and groundwater sampling results are provided in Appendix A. All data will be presented in tabular format in the final report. Field notes, describing the observations from each soil boring, are included in Appendix B.

On January 28, 2000, First Environment installed and developed three 2-inch permanent flush mount monitoring wells (FMW-5, FMW-6 and FMW-7). The monitoring wells were located consistent with the northwesterly direction of groundwater flow as had been reported in the Draft Groundwater Flow Evaluation and Sampling Plan. Each well was installed and screened from 2 to12 feet below grade across the water table, which was encountered at approximately 3 feet below grade. Well construction logs for each well are included in Appendix C.

FMW-5 was installed at the former B-5 location, where oily soil and elevated concentrations of VOCs and SVOCs were identified in both soil and groundwater. First Environment also installed FMW-6 and FMW-7 approximately 100 feet down gradient from the former Burn Pit in an effort to determine if potential groundwater contamination exists down gradient of the Burn Pit . The locations of the monitoring wells are presented on Figure 1.

On February 17, 2000 each monitoring well was purged and groundwater samples were collected for analysis for VOCs (method 8260) and SVOCs (method 8270). These samples were submitted to the Westchester County Department of Laboratory and Research for analysis. No detectable concentrations of VOCs and SVOCs were detected at downgradient wells FMW-6 and FMW-7. At FMW-5, groundwater was found to contain VOC concentrations of benzene (1.2 ppb), cis-1,2-dichloroethane (63 ppb), vinyl chloride (40 ppb), total xylene (29.91 ppb), trichloroethene (1.4 ppb) as well as SVOCs including naphthalene (7.6 ppb), phenanthrene (2.6 ppb), fluorene (2.5 ppb). Analytical results are provided in Appendix D.

On April 17, 2000 First Environment conducted test pits at B-5 and B-7 from which soil samples were collected for waste classification. Waste classification samples indicate that the soil is non-hazardous. Waste Classification analytical results are included in Appendix E.



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SOIL EXCAVATION AND SAMPLING

To remediate this area, soil will be excavated over an area of approximately 100 feet by 40 feet to the water table at a depth of between 4 to 6 feet below grade. This excavation will necessitate the removal and replacement of FMW-5. This excavation will remove the source materials and will reduce the potential impact to groundwater in the area. Note that the original areal extent of the excavation (20x40x4) was incorrect. Rather the proposed excavation area has been defined based on the soil borings and test pits conducted in the Burn Pit Area. During the excavation activities, First Environment will collect base and side-wall soil samples, which will be analyzed with the PID. The PID screening will help define the limits of the excavation and will ensure that all impacted soil will be excavated.

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or

First Environment anticipates collecting one side-wall and base sample for approximately every 35 linear feet of excavation. These samples, including field and trip blanks will be submitted to a New York Certified Laboratory for analysis for VOCs (method 8260) and SVOCs (method 8270).

Providing sample results are below the NYSDEC TAGM standards, the excavation will be backfilled to grade using clean airport fill. If post excavation results indicate soil is above the NYSDEC TAGM standards, additional excavation may be necessary.

WELL INSTALLATION AND SAMPLING

After the excavation is back filled to grade with clean fill, First Environment will replace the former FMW-5 monitoring well. In addition at the request of the NYSDEC, First Environment will install one additional upgradient monitoring well, FMW-8, approximately 75 feet southeast of FMW-5.

Groundwater samples will then be collected from FMW-5, FMW-6, FMW-7 and FMW-8. These samples, including field and trip blanks, will be submitted to a New York Certified Laboratory for analysis for VOCs (method 8260) and SVOCs (method 8270).

Upon receipt of all analytical data, First Environment will prepare a closure report which documents the soil and groundwater investigation activities, the extent of the soil excavation, soil disposal activities as well as groundwater sampling results, including recommendations for additional investigation or remediation, if warranted.

If you have any questions or need additional information, please do not hesitate to call.

Very truly yours,

FIRST ENVIRONMENT, INC.

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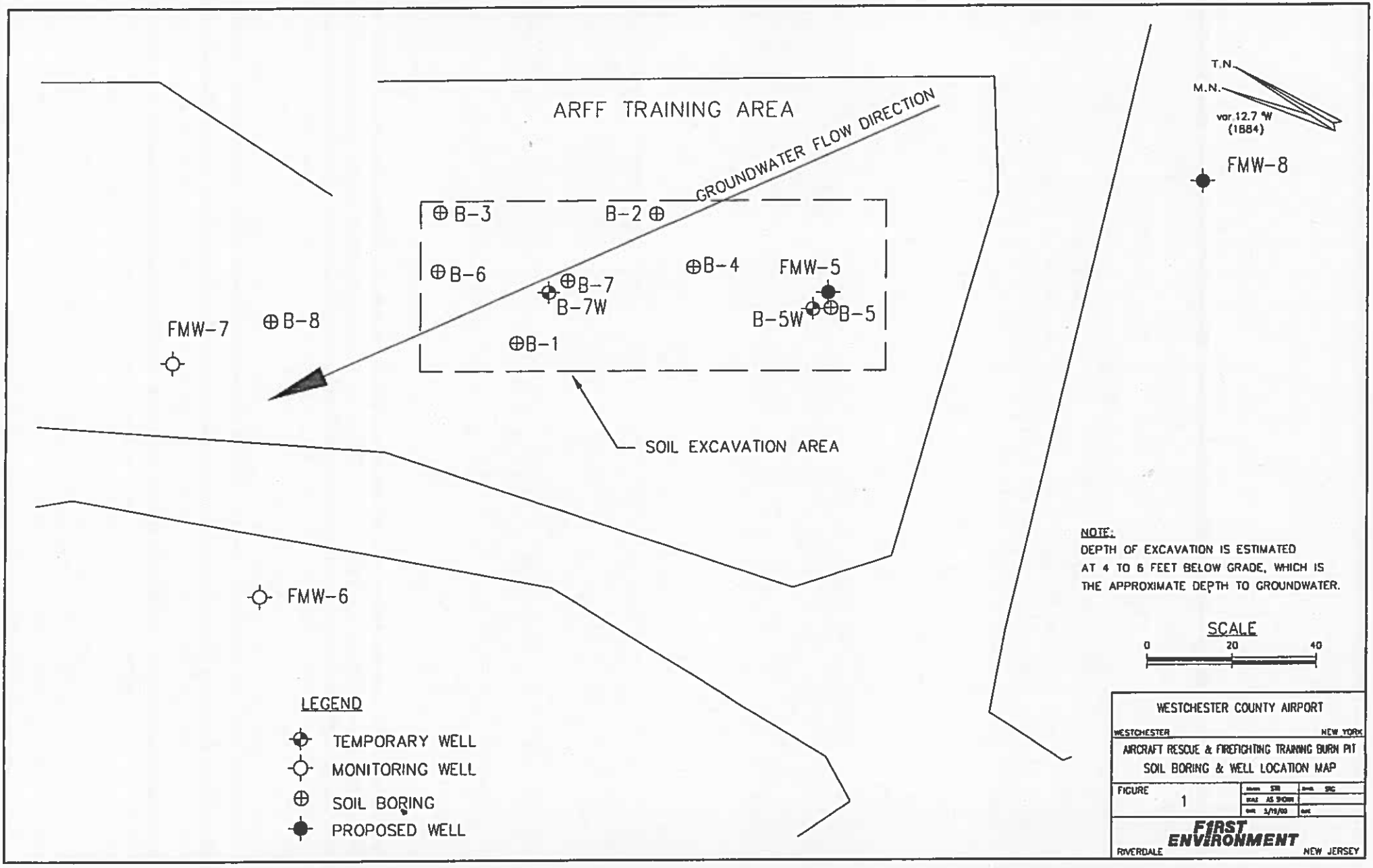
Senior Hydrogeologist

cc: Harry Stanton
Robert Funicello
Reeva Schiffman, Esq.
Tod Delaney Ph.D., P.E., DEE


ARFF TRAINING AREA
GROUNDWATER FLOW DIRECTION
B-3
B-2
B-6
B-4
FMW-5
B-7
B-7W
B-5W
B-5
FMW-7
B-8
B-1
SOIL EXCAVATION AREA
FMW-6
T.N.
M.N.
var.12.7 °W
(1884)
FMW-8
NOTE:
DEPTH OF EXCAVATION IS ESTIMATED
AT 4 TO 6 FEET BELOW GRADE, WHICH IS
THE APPROXIMATE DEPTH TO GROUNDWATER.
SCALE
0
20
40
LEGEND
TEMPORARY WELL
MONITORING WELL
SOIL BORING
PROPOSED WELL
WESTCHESTER COUNTY AIRPORT
WESTCHESTER
NEW YORK
AIRCRAFT RESCUE & FIREFIGHTING TRAINING BURN PIT
SOIL BORING & WELL LOCATION MAP
FIGURE
1
AS SHOWN
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NEW JERSEY