AER ADVANCED ENVIRONMENTAL REDEVELOPMENT, LLC

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COMMUNITY AIR MONITORING PLAN
YONKERS DOWNTOWN
WATERFRONT DEVELOPMENT
PARCELS E AND F
YONKERS, NEW YORK
PROJECT #214

Prepared for:

On its own behalf and on behalf of
Hudson Park Investors, LLC
C/O Collins Enterprises, LLC
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1.0 INTRODUCTION

AER, LLC was retained by Collins Enterprises, LLC to prepare a Community Air Monitoring Plan for soil remedial activities to take place at Parcels E and F of the Yonkers Downtown Waterfront Development in Yonkers, New York. This Community Air Monitoring Plan will be conducted in conjunction with AER's Remedial Work Plan established under the agreement to remediate between Hudson Park Investors, LLC and the NYSDEC. This remediation is being conducted as part of the 1996 Clean Water/Clean Air Bond Act, Environmental Restoration Projects – Title 5, Project Number B00045-3. The study site parcels are located along the eastern shore of the Hudson River and west of the New York Central Railroad (NYCRR or Conrail) Right-of-Way. This community air monitoring plan is based upon previous air monitoring plans developed for similar properties and the New York State Department of Health Generic Community Air Monitoring Plan (October 2000) model. The plan is also based upon the results of the August 1998 AKRF Site Investigation Report. Both metals and semi-volatile organic compounds were identified as contaminants of concern.

This Community Air Monitoring Plan (CAMP) will require time-averaging monitoring for semi-volatile organic compounds, metals and particulates (i.e., dust) at both the upwind and downwind perimeter of each designated work area. The CAMP will provide a measure of protection for the downwind community (i.e., off-site receptors including residences, businesses and on-site workers not directly involved with remedial activities) from potential airborne contaminant releases. The action levels specified herein require increased monitoring, corrective actions to abate emissions and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Reliance on the CAMP should not preclude simple, common sense measures to keep semi-volatile organic compounds, metals, dust and odors at a minimum in and around the work areas.

2.0 DESCRIPTION

According to site investigation reports prepared by AKRF (August 1998), semi-volatile organic compounds and metals were detected in soils encountered on both Parcels E and F above NYSDEC soil cleanup objectives. AER will establish and implement a perimeter air-monitoring program for the duration of the project when ground intrusive site activities are necessary (i.e., when affected soils are exposed). If affected soils are placed beneath gravel or other dust control measures are implemented, the air monitoring will not be performed. The perimeter will be defined as the site boundary directly downgradient of any ground intrusive activities.

Monitoring will be accomplished using a photoionization detector (PID) and a handheld particle counter (PM_{10}). Although semi-volatile compounds and metals will not likely be recorded using the PID, they will likely be associated with dusts, which will be recorded using the particle counter. The PID monitoring will add an additional level of safety if materials other than those that are expected are encountered.

3.0 ORGANIC COMPOUND MONITORING

Semi-volatile and possibly volatile organic compounds may be encountered in on-site soils, and therefore must be monitored at the downwind site perimeter of the immediate work area only if affected soils are exposed. Fifteen-minute averages will be calculated and recorded by the instrumentation. Upwind concentrations will be measured prior to the initiation of daily construction activities. The monitoring will be performed using an organic vapor meter manufactured by Thermo Environmental Instruments, Inc. Model 580 EZ (PID) or equivalent. The PID will be calibrated daily according to the manufacturers procedures. The equipment is capable of calculating 15-minute average concentrations or less, which will be compared to the levels specified below:

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area zone exceeds 5 parts per million (ppm on PID readings) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total PID readings readily decrease (per instantaneous readings) below 5 ppm over background, work activities will resume with continued 15-minute average monitoring.

- If total organic vapor levels at the downwind perimeter of the work area persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source identified, corrective actions taken to abate emissions and 15-minute average monitoring continued. After these steps, work activities will resume provided that the total organic vapor level located approximately 200 feet downwind of the work area or half the distance to the nearest potential receptor, whichever is less – but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the PID readings are above 25 ppm at the perimeter of the work area, activities must be shutdown.

The 15-minute average readings will be recorded and be available for NYSDEC and NYSDOH personnel to review. Instantaneous readings, if any, used for field decision purposes should also be recorded. Field data will be recorded on data sheets similar to that found in Appendix A.

4.0 PARTICULATE MONITORING

Metals and semi-volatile organic compounds were detected in site soils, and their distribution will likely be related to dust generation. Particulate concentrations will be monitored continuously at the downwind site perimeter of the immediate work area only if affected soils are exposed. The particulate monitoring will be performed using real-time monitoring equipment capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will include an audible alarm to indicate an exceedance

of the action level (100 mcg/m^3). Monitoring will be conducted using a particle measurement systems, ABACUS 301 Hand Held Particle Counter or equivalent. This device will be calibrated daily according to the manufacturer's specifications. Fugitive dust migration will also be visually assessed during the work activities.

- If the downwind PM_{10} particulate level is 100 mcg/m^3 greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM_{10} particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area. Dust suppression techniques will include water, polymer, gravel or other material application.

- If, after implementation of dust suppression techniques, downwind PM_{10} particulate levels are greater than 150 mcg/m^3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM_{10} particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

The readings will be recorded and available for NYSDEC and NYSDOH personnel to review. Data will be recorded on data sheets similar to that found in Appendix A.

5.0 AIR MONITORING ZONE

Real time air monitoring will be performed whenever semi-volatile or metals containing soils are exposed. Measurements will be taken continuously and 15-minute averages will be recorded with the PID and the PM_{10} monitor. These measurements will be made as close to the construction activity as practical (downgradient property boundary and not less than 20 feet) and at the breathing height of the workers. The Health and Safety Officer will set up and calibrate the equipment each day it is needed, and confirm that it is working properly. His designee may oversee the air measurements during the day. The initial measurements for the day will be performed before the start of work activities and will establish the background level for that day. The background measurement will not be taken when unusual activities are taking place.

APPENDIX A
TYPICAL FIELD DATA SHEET

AER Advanced Environmental Redevelopment, LLC
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Community Air Monitoring Plan
Yonkers, New York

Site: _____ Date: _____

Instrument: _____ Calibration: _____

Background Reading	Time	Value

15-minute Average	Time	Value	15-minute Average	Time	Value

Instantaneous Readings

Instant Readings	Time	Value

Notes: _____