Air Monitoring Plan – Tallaboa Industrial Park (former PR Polefins) Asbestos ER Site

U.S. EPA, Region II
Emergency Response

Site:

Tallaboa Industrial Park (former PR Polefins) Asbestos ER Site
Penuelas, Puerto Rico

Prepared for:

Response and Remediation Branch,
Caribbean Environmental Protection Division, Region II
US Environmental Protection Agency
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Table of Contents

1.0 INTRODUCTION 1
1.1 Contaminants of Concern 1
1.2 Monitoring Procedures 2
1.2.1 Basis for Establishing the Air Monitoring Action Levels 2
1.3 Perimeter Air Monitoring Procedures 2
1.4 Non-working Hours 3
2.0 AIR MONITORING EQUIPMENT 3
2.1 Equipment Maintenance 3
2.2 Equipment Calibration 3
3.0 REPORTING OF AIR MONITORING RESULTS 3
3.1 Community Notification Procedures 3
3.2 On-Site Reporting Procedures 3
3.3 Data Review and Interpretation 4

Tables

Table 1-1: Air Monitoring Specifications 1
Table 1-2: Air Monitoring Action Levels for fugitive dust and particulate matter (Direct-Reading Instrumentation) 2

Attachments

Attachment A: Site Location
Attachment B: TSI DUSTTRAK™ Manual
Attachment C: Daily Air Monitoring Logs – Monitoring locations

1.0 INTRODUCTION

The Tallaboa Industrial Park (former PR Polefins) Asbestos ER Site (the Site) is located at Road 385, KM 5.4, Tallaboa, Poniente Peñuelas, Puerto Rico. During a visual inspection, the U.S. Environmental Protection Agency (USEPA) identified fugitive dust clouds migrating out of the facility during demolition activities conducted by HOMECA Inc. EPA collected wipe, bulk, and soil samples that identified asbestos fibers in different areas of the facility. As part of the sampling event, wipe samples were collected at a residential property, restaurant, security road barrier, and at a school located adjacent to the Site. Asbestos fibers were identified in all samples collected from off Site locations.

This Air Monitoring Plan (AMP) outlines monitoring strategies which will be used to assess potential perimeter exposure to chemical hazards during the asbestos Removal Action being conducted on site. Air monitoring will include direct-reading of fugitive dust and particulate matter (10 µm) using TSI DUSTTRAK™ units. Direct reading instrumentation will be used to compare fugitive dust and particulate generated on site against *New York State Department of Environmental Conservation Technical Guidance for Site Investigation and Remediation* identified in Table 1-2. No Puerto Rico-specific fugitive dust standards are available which is why the New York State standards will be used.

The EPA On-Scene Coordinator (OSC) will determine the locations where air monitoring will be performed based on daily operations. Refer to Attachment A for the Site Location Map.

1.1 Contaminants of Concern

Asbestos containing material was identified on the Site and off site locations. All the material is exposed to the atmosphere which could cause an increase in asbestos dust and particulate matter in the air. Therefore, EPA requires the installation of particulate monitors that will provide data on the air quality in the area of concern.

The procedure to assess the potential exposure of personnel along the perimeter of the work area is defined further within this document. A general overview of the instrumentation and proposed strategy used in the air monitoring efforts is presented in Table 1-1.

Table 1-1: Air Monitoring Specifications

Instrumentation	Equipment/Proposed Strategy	Contaminants of Concern
Direct Reading Instrumentation TSI DUSTTRAK™	Perimeter Monitoring Fugitive dust and particulate matter (10 µm) 1. If perimeter direct readings are above the Site-Specific Action Level, the removal contractors will be notify and will require the implementation of mitigation practices to control fugitive dust.	1. Asbestos

1.2 Monitoring Procedures

Air monitoring will be performed along the Site perimeter to determine any exposure resulting from actions being taken at the Site. Monitoring will be conducted due to the fact that this area is exposed to the atmosphere and activities conducted could cause an increase in asbestos dust and particulate matter in the air. Monitoring will be conducted by the use of TSI DUSTTRAK™ units at various locations including the perimeter of the work area (downwind) and support zone. Refer to Attachment A for the Site Location Map. The response activities outlined in Table 1-2 represent the actions that will be taken by on-site personnel to mitigate elevated exposures in order to maintain exposure levels below applicable limits.

The proposed fugitive dust and particulate matter (10 µm) Site-Specific Action Levels and appropriate response procedures for perimeter air monitoring are specified in Table 1-2. The Site-Specific Action Levels and response activities specified in Table 1-2 will be used for the exposure monitoring aspects as well. Since Puerto Rico does not have established air monitoring action levels for fugitive dust and particulate matter during removal actions, the values, procedures, and response actions specified in the *New York State Department of Environmental Conservation Technical Guidance for Site Investigation and Remediation* will be used.

Table 1-2: Air Monitoring Action Levels for fugitive dust and particulate matter (Direct-Reading Instrumentation)

Parameter	Zone Location and Monitoring Interval	Action Levels (Above Background)	Response Activity
Fugitive dust and particulate matter (10 µm)	Permanent: perimeter zone Periodic: monitoring during removal and load-out activities	100 µm/m^3	Dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration
		>150 µm/m^3 (15 minutes average)	Work must stop and EPA must be notified.

µm/m^3 = Micrograms per cubic meter

1.2.1 Basis for Establishing the Air Monitoring Action Levels

The Site-Specific Action Levels for fugitive dust and particulate matter in Table 1-2 were cited from the *New York State Department of Environmental Conservation Technical Guidance for Site Investigation and Remediation.*

1.3 Perimeter Air Monitoring Procedures

Perimeter air monitoring will be performed to determine if fugitive dust and particulate matter concentrations above the Site-Specific Actions Levels outlined on Table 1-2, are detected during removal activities. Perimeter monitoring will utilize direct-reading instrumentation.

The following information pertains to the perimeter monitoring effort:

- Direct-reading measurements using a TSI DUSTTRAK™ will be completed at locations determined by the OSC. Please refer to Attachment A for Site Location Map.
- RST 2 personnel will document the on-going operations at the Site during the removal process in order to identify the reason for any elevated readings and determine a recommended course of action for mitigation purposes. The air monitoring Site-Specific Actions Levels and planned response activities for the perimeter monitoring effort are identical to the Site-Specific Actions Levels and response activities shown in Table 1-2.

1.4 Non-working Hours

No monitoring will be accomplished during non-working hours. No release of contaminants, above background levels, is anticipated during non-working hours.

2.0 AIR MONITORING EQUIPMENT

2.1 Equipment Maintenance

All monitoring equipment will be maintained in accordance with applicable manufacturer recommendations. All pertinent data will be logged in a health and safety logbook (or equivalent) and maintained on-site for the duration of site activities.

2.2 Equipment Calibration

All direct-reading instrumentation will be calibrated in accordance with the manufacturer's instructions. Calibration values will be annotated in the site logbook. Please refer to Attachment B for DUSTTRAK™ calibration procedure.

3.0 REPORTING OF AIR MONITORING RESULTS

3.1 Notification Procedures

The specific notification procedures will be at the discretion of the OSC. The exact notification procedures will be developed based on the most feasible means of getting information to the personnel in an effective, useful, and timely manner.

3.2 On-Site Reporting Procedures

The Site Health and Safety Representative will maintain a sample log and report fugitive dust and particulate matter levels on a daily basis to the OSC. Elevated results (*i.e.,* above Site-Specific Actions Levels) will be reported immediately to the OSC so appropriate engineering controls can be implemented to reduce levels.

3.3 Data Review and Interpretation

The general public will be able to review the data collected on-site once the air monitoring data has been finalized and based upon the OSC's authorization for release of the information. Monitoring records will be maintained on-site.