

Minillas Complex Asbestos Site



**CARIBBEAN REGIONAL RESPONSE TEAM
MEETING**

AUGUST 6 – 8, 2013

GUAYNABO, PUERTO RICO

Incident



- During the weekend of May 10 to 13, 2013, contractors from the Puerto Rico Public Building Authority (PBA) started an inside demolition work in Floor # 9 of the North Tower of the Minillas Government Complex.
- Floor # 9 had an identified area with Asbestos Containing Material (ACM), for which an asbestos removal permit was requested, but not granted at the time of the incident, to the Puerto Rico Environmental Quality Board (EQB).
- The demolition crew removed all the physical areas, including the area with ACM, and disposed of the debris on outside dumpsters.

Incident



- Air conditioning system was on during the entire demolition.
- Passenger elevators and the stairways were used to move all the generated debris (including ACM).
- On Monday, May 14, 2013, a citizen informed EPA about an inappropriate handling of ACM debris in the building.
- On May 15, 2013, personnel from the Air Program in Caribbean Environmental Protection Division (CEPD) conducted an asbestos related inspection.
 - The Air program referred this situation to the Emergency Response Team in CEPD.

Incident



- **On May 16, 2013, a removal action assessment was conducted.**
 - A total of 21 biased samples were collected in strategic locations to determine the presence of ACM.
 - Asbestos was found from concentrations as high as 2,920,000 s/cm².
 - EPA issued a Field Notice of Federal Interest to PBA on May 20, 2012.
- **After discussion with EQB and CEPD Management, a recommendation for restricting the access to the building was given to PBA.**
 - The building was closed from May 21, 2012 to April 17, 2013.

Site Description



- Building has 17 floors, a ground floor, elevator mechanical room, two interior stairways, two elevator shaft with two elevator each, and two air conditioning systems.
 - Each floor is approximately 18,000 ft²
- The building leases office spaces to seven Commonwealth Agencies. Over 1,000 people work in the building.

Removal Actions



- **Emergency Removal Action**
 - On May 21, 2012, emergency removal activities began by EPA
 - May 28, 2012, Potential Responsible Parties (PRPs) took over the emergency removal action
 - June 28, 2012, Emergency removal action was completed

Emergency Removal



Emergency Removal



Emergency Removal



Asbestos Removal Action



06 25 2012

Removal Actions



- **Asbestos Removal Action**
 - August 24, 2012 EPA and two PRPs signed an Administrative Settlement Agreement and Order on Consent to conduct a cleanup at the building.
 - EPA created a technical team to assist the PRPs to prepared a comprehensive sampling plan and asbestos cleanup and clearance plan to be used in this removal action.
 - ✦ Asbestos experts in Region 2
 - ✦ ATSDR representatives
 - From September 25, 2012 to April 17, 2013- Asbestos Removal Action.

Asbestos Removal Action



- **Representative Sampling Criteria**
 - Nine random air samples per floor (NIOSH 7400/7402)
 - Nine random porous samples per floor (ASTM D5755-03)
 - Nine random non-porous (wipe) samples per floor (ASTM D6480)
 - Collect at least one sample per each return and supply (wipe or microvac method) per floor
- **Analytical Parameter**
 - Air Samples: 0.002 fibers per cubic centimeter
 - Porous Samples: 5,000 structures per square centimeter
 - Non-porous Samples: 5,000 structures per square centimeter

Asbestos Removal Action



- **Cleanup Sequence**
 - **First**
 - ✦ Two elevator shafts
 - ✦ Four elevator cabins
 - ✦ Elevator machine room
 - **Second**
 - ✦ Floors 17 to 9
 - **Third**
 - ✦ Floors P to 8
 - **Fourth**
 - ✦ Stairways
 - ✦ Ground floor
 - ✦ Two elevators
 - ✦ Decon area

Asbestos Removal Action



Asbestos Removal Action



Asbestos Removal Action



Asbestos Removal Action



Results



- **Complex cleanup completed in seven months:**
 - Expedited review of documents
 - EPA 100% oversight
 - Two-way communication
- **Removal of all ACM in additional floors.**
- **Removal of all air conditioning ducts.**
- **Approximately 1,468 yd³ of asbestos contaminated wastes were generated and disposed of.**
- **Approximately 19,000 gallons of asbestos contaminated water were generated and disposed of.**
- **Over \$2.2M were expended.**

Questions

