

WTC 2

Cost of Indoor
cleaning
11/19/02

Department of Environmental Protection
Asbestos Control Program

1 Number apartments requested for air monitoring and / or cleaning	250
2 Number of contractors with a crew size of 25 people (crew of 5/apt)	5
3 Target apartments for clean up /day	25
4 Total number of days for clean-up	10
5 Cost of clean-up / apt	\$4,000
6 Cost of asbestos air monitoring /apt	\$1,000
7 Cost of consultant to oversee the clean-up /day (three consultants @\$1,000 /day)	\$3,000
8 Total Cost of clean-up	\$1,000,000
9 Total air monitoring cost	\$250,000
10 Total consultant cost	\$30,000
11 TOTAL COST(8+9+10)	\$1,280,000

Note: As of April 23, 2002, since the inception of the Mayor's hot line at OEM we have received 137 requests for clean-up and 113 requests for air testing.

4/25/02

HVAC Action
plan

NYC Department of Environmental Protection Indoor Clean Up Program

HVAC Action Plan

- I.
 - 1) Obtain building records from the building owner, manager, and/or engineer in accordance with EPA/DEP contractual protocol on the HVAC systems and activities performed by the building owner in relation to the HVAC after 9/11/2001.
 - 2) Examine report for each of the HVAC Systems from the contracted Environmental Consultants.
 - 3) If the system requires cleaning, contact the cleaning/HVAC contractors to see if the work can be performed in accordance with the existing scope of work.
- II.
 1. Finalize a revised checklist and scope-of-work with USEPA and NYCDEP HVAC consultants.
 2. Instruct HVAC subcontractors with respect to HVAC evaluation, checklist content and report preparation to ensure consistent investigations and standardize reporting. Particular attention shall be focused on the revised checklist.
 3. Require immediate QA/QC on the Consultants report and evaluation as needed and triggered according to pre-established criteria for QA/QC. The QA/QC on the Consultants findings shall be performed by a separate independent contractor under a new contract with the NYCDEP. The QA/QC shall include an independent evaluation of the HVAC system and submittal of findings in writing to the NYCDEP. The QA/QC will include a review of the original report and examination of the system. (Check and Balance)

Note: Bulk and / or air sampling can be done to augment our recommendation.

1/8/03

Briefing Notes for Kathleen Callahan

HVAC issues

Containment

EPA - Wants to have containment installed for the air-handling unit during cleaning, regardless of where the unit is located.

DEP - Thinks that containment is necessary only where the system is heavily impacted with debris and should be done on a case-by-case basis following guidelines that DEP and EPA agree upon.

Signage

EPA - Feels that asbestos signage is warranted when work is ongoing. However, are checking with OSHA to verify.

DEP - Feels that a caution sign should be sufficient. Do not want to panic the public for no reason.

General Comments

DEP feels the two above issues are overkill by EPA for what the program is designed to accomplish.

Exhaust Cleaning

DEP is concerned that EPA will not get access to all apartments in cleaning an exhaust system. In addition, DEP is concerned that those vents that do not need cleaning, but will be cleaned under the current scenario, will cause undue hardship and raise anxiety levels in people. DEP has also learned that in Quad D, a camera has been used to verify presence/absence of debris. DEP is concerned that we can be criticized for not employing consistent methods of evaluation. Therefore, we propose that all Quads use a camera. This will allow for consistency throughout the program and will serve as a check for the HVAC subcontractors. We also feel that this method will allow the program to clean only areas where we find debris. This methodology will allow the program to move forward without upsetting the public needlessly.