ENVIRONMENTAL TECHNOLOGIES
a Division, COLE CONSULTING CORPORATION

Elmsford Executive Park, Building 5
2269 Saw Mill River Road ■ Elmsford, New York 10523
TELEPHONE 914 • 345 • 6000 ■ FACSIMILE 914 • 345 • 0045

February 6th, 2003

Mr. Andrew Confortini
EPA Quad B Leader
USEPA, 17TH Floor
290 Broadway
New York, NY. 10007-1866

Re: **WTC HVAC Report for 50 Warren Street**

Dear Mr. Confortini,

According to visual inspection conducted by our HVAC Specialist Duct Dusters Air Duct Cleaning, Environmental Technologies Division, Cole Consulting Corp hereby recommend that two equipments should be cleaned because WTC dust was found in the equipments.

The HVAC Unit that service the lobby and Boiler Room Air Intake on the roof were impacted and should be cleaned.

All other systems were not impacted. Please note that there are **eight (8) Passive Shaft/Duct units in this building. This constitutes eight (8) inspections. Also there is one (1) Mechanical Exhaust System unit on the roof. This constitute one (1) inspection.** Equally there is one Central Ventilation System in the building. This also constitute one inspection. Thus we have a total of **ten (10) inspections** in this building.

Please do not hesitate to call me if you have any question with this report.

Yours truly,
Environmental Technologies

John Anuforo
Division Manager

VENTILATION SYSTEM EVALUATION FORM

Please complete this form in accordance with instructions in the accompanying guidance document

Part 1.0 General Information

Date of evaluation: 2/4/03	Building contact name and phone:
Evaluation team (list name and affiliation):	
	(Environmental professional)
TONY GALLO - DUCT BUSTERS	(HVAC professional)
Building address:	Type of Facility (check all that apply):
50 WARREN ST	✓ Residential
	Multi-use
	Other (describe)
Date of construction:	
Number of residential units:	Number of floors: 5
Prior inspection report/maintenance records available for review?:	
Other comments	

Ventilation system types (check all that apply and indicate total no. of units)

Central ventilation system Est. no. of units 1	Mechanical exhaust system Est. no. of units 1
Mechanical make-up air system Est. no. of units	Passive shaft/duct Est. no. of units 8
Other (describe)	

I certify that to the best of my knowledge, the information and observations recorded on this form including all attachments are a true and accurate representation of site conditions.

Ventilation System (HVAC) Evaluator **Date** 2/4/03

Part 2.0 Visual Inspection Forms

Use the attached forms to document visual inspections. Complete the forms in accordance with instructions in the accompanying guidance document.

2.1 Central Ventilation System Visual Inspection Form

Ventilation System Identification: LOBBY A/C

Location: LOBBY - APPT PII

Area Served: LOBBY

Associatedmechanical room: clean ✓ Y N dry ✓ Y N stored chemicals/refuse Y ✓ N

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Co ξ pre ξ fou ξ ina
Outside air intake: Location:			
Accessible for inspection? Y____ N____ (explain):			N
louvers, grates and/or screens			
outside air duct			
outside air damper(s)			
Air handling unit:			
outside air mixing chamber			
filter rack(s)			
filter media	Y	N	
blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators	Y	N	
blower housing acoustical lining	Y	Y	
pre-heat coils	Y	Y	
heating coils			
cooling coils			
re-heat coils	Y	N	
condensate drain pan			
supply air plenum	Y	N	
supply air plenum damper(s)	Y	Y	
vibration collars			
Supply air distribution:			
Supply air ducts Est. total ln ft 100 No. locations inspected 2 Specify type (circle): (metal) (fibrous glass lined metal) masonry fibrous glass board flex-duct wood	Y	Y	
Accessible in-line fire dampers Est. total qty No. locations inspected			
Accessible turning vanes Est. total qty No. locations inspected			
In-line reheat/cooling coils Est. total qty No. locations inspected			
Supply air diffusers Est. total qty 4 No. locations inspected 2	Y	N	
Return air distribution:			
Return air ducts Est. total ln ft 15 No. locations inspected 1 Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Return air plenum Est. total RA plenum areas 1 No. locations inspected 1	Y	N	
Return air plenum damper Est. total qty____ No. locations inspected			
Accessible in-line fire dampers Est. total qty____ No. locations inspected			NP

Accessible turning vanes Est. total qty_____ No. locations inspected			NP
Return air grilles Est. total qty 1 No. locations inspected 1	Y	N	

2.1 Central Ventilation System Visual Inspection Form

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Other (specify):			

Other Information:

Filter loading (light, moderate, heavy): NORMAL

Abraded/delaminated acoustical lining

Filter bypass (describe)

General impression (indicate recommendations for cleaning based on finding of WTC dust):

WTC DUST FOUND IN AHU. CLEANING IS RECOMMENDED.

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown

2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: BOILER RM AIR INTAKE

Location: ROOF

Area Served: BOILER RM

Associated mechanical room: clean Y N dry Y N stored chemicals/refuse Y N

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Exhaust air outlet: Location: Accessible for inspection? Y ✓ N _____ (explain):	Y	Y	
louvers, grates and/or screens	Y	Y	
outside air duct	Y	Y	
outside air damper(s)			NP
Exhaust fan unit:			
blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators	Y	Y	
blower housing acoustical lining			NP
vibration collars			NP
Exhaust air distribution: Exhaust air ducts inspected 2 Est total ln ft 50 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	Y	
Accessible in-line fire dampers Est. total qty _____ No. locations inspected _____			NP
Accessible turning vanes Est. total qty _____ No. locations inspected _____			NP
Exhaust air grilles Est. total qty 1 No. locations inspected 1	Y	Y	
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

WTC DUST FOUND IN SYSTEM. CLEANING IS RECOMMENDED.

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown

2.4. Passive Shaft/Duct Visual Inspection Form

Passive Shaft/Duct Identification: #1	
Location: Roof	Area Served:

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Outside air intake (if servicing supply air): Location:			
Accessible for inspection? Y____ N_____(explain):			
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: Roof			
Accessible for inspection? Y ✓ N_____(explain):	Y	N	
louvers, grates, screens or weather cap	Y	N	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty_____ No. locations inspected_____ Specify shaft substrate (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood			
Accessible fire dampers Est. total qty No. locations inspected			
Pipes/mechanical equipment, etc. located in shaft	P		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty 5 No. locations inspected 1 Specify shaft substrate (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty No. locations inspected			NP
Pipes/mechanical equipment, etc. located in shaft			NP
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown

2.4 . Passive Shaft/Duct Visual Inspection Form

Passive Shaft/Duct Identification: #2

Location: Roof

Area Served:

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Outside air intake (if servicing supply air): Location: Accessible for inspection? Y____ N____(explain):			
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: Roof Accessible for inspection? Y✓ N____(explain):	Y	N	
louvers, grates, screens or weather cap	Y	N	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty____ No. locations inspected____ Specify shaft substrate (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood			
Accessible fire dampers Est. total qty____ No. locations inspected			
Pipes/mechanical equipment, etc. located in shaft	P		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty 5 No. locations inspected 1 Specify shaft substrate (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty No. locations inspected			NP
Pipes/mechanical equipment, etc. located in shaft			NP
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown

2.4 Passive Shaft/Duct Visual Inspection Form

Passive Shaft/Duct Identification: #3	
Location: Roof	Area Served:

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Outside air intake (if servicing supply air): Location: Accessible for inspection? Y____ N____ (explain):			
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: Roof Accessible for inspection? Y____ N____ (explain):	Y	N	
louvers, grates, screens or weather cap	Y	N	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty____ No. locations inspected____ Specify shaft substrate (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood			
Accessible fire dampers Est. total qty No. locations inspected			
Pipes/mechanical equipment, etc. located in shaft	P		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty 5 No. locations inspected 1 Specify shaft substrate (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty No. locations inspected			NP
Pipes/mechanical equipment, etc. located in shaft			NP
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown

2.4. Passive Shaft/Duct Visual Inspection Form

Passive Shaft/Duct Identification: #4	
Location:	Area Served:

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Outside air intake (if servicing supply air): Location: Accessible for inspection? Y____ N____ (explain):			
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: Roof Accessible for inspection? Y ✓ N____ (explain):	Y	N	
louvers, grates, screens or weather cap	Y	N	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty____ No. locations inspected____ Specify shaft substrate (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood			
Accessible fire dampers Est. total qty____ No. locations inspected			
Pipes/mechanical equipment, etc. located in shaft	P		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty 5 No. locations inspected 1 Specify shaft substrate (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty____ No. locations inspected			NP
Pipes/mechanical equipment, etc. located in shaft			NP
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown

2.4 Passive Shaft/Duct Visual Inspection Form

Passive Shaft/Duct Identification: #5	
Location: Roof	Area Served:

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Outside air intake (if servicing supply air): Location: Roof Accessible for inspection? Y____ N____ (explain):			
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: Roof Accessible for inspection? Y ✓ N____ (explain):	Y	N	
louvers, grates, screens or weather cap	Y	N	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty____ No. locations inspected____ Specify shaft substrate (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood			
Accessible fire dampers Est. total qty No. locations inspected			
Pipes/mechanical equipment, etc. located in shaft	P		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty 5 No. locations inspected 1 Specify shaft substrate (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty No. locations inspected			NP
Pipes/mechanical equipment, etc. located in shaft			NP
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

NOTE: NP = not present; NF = not found; I = inaccessible; U = unknown

2.4. Passive Shaft/Duct Visual Inspection Form

Passive Shaft/Duct Identification: #6	
Location: Roof	Area Served:

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Outside air intake (if servicing supply air): Location: Accessible for inspection? Y____ N____(explain):			
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: Roof Accessible for inspection? Y✓ N____(explain):	Y	N	
louvers, grates, screens or weather cap	Y	N	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty____ No. locations inspected____ Specify shaft substrate (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood			
Accessible fire dampers Est. total qty____ No. locations inspected____			
Pipes/mechanical equipment, etc. located in shaft	P		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty 5 No. locations inspected 1 Specify shaft substrate (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty____ No. locations inspected____			NP
Pipes/mechanical equipment, etc. located in shaft			NP
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown

2.4. Passive Shaft/Duct Visual Inspection Form

Passive Shaft/Duct Identification: #7	
Location: Roof	Area Served:

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Outside air intake (if servicing supply air): Location: Accessible for inspection? Y___ _N_____(explain):			
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: Roof Accessible for inspection? Y✓ N_____(explain):	Y	N	
louvers, grates, screens or weather cap	Y	N	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty_____ No. locations inspected_____ Specify shaft substrate (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood			
Accessible fire dampers Est. total qty No. locations inspected			
Pipes/mechanical equipment, etc. located in shaft	P		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty 5 No. locations inspected 1 Specify shaft substrate (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty No. locations inspected			NP
Pipes/mechanical equipment, etc. located in shaft			NP
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown

2:4 Passive Shaft/Duct Visual Inspection Form

Passive Shaft/Duct Identification: #8

Location: Roof

Area Served:

System Components [NOTE: if component not present (NP), not found (NF) or inaccessible (I) please indicate in last column]	Surface Dust/ Debris Present?	WTC Dust Present?	Component ξ not present ξ not found ξ inaccessible
Outside air intake (if servicing supply air): Location: Accessible for inspection? Y____ N____ (explain):			
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: Roof Accessible for inspection? Y ✓ N____ (explain):	Y	N	
louvers, grates, screens or weather cap	Y	N	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty____ No. locations inspected____ Specify shaft substrate (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood			
Accessible fire dampers Est. total qty____ No. locations inspected____			
Pipes/mechanical equipment, etc. located in shaft	P		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty 5 No. locations inspected 1 Specify shaft substrate (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty No. locations inspected			NP
Pipes/mechanical equipment, etc. located in shaft			NP
Other (specify):			

Other Information:

General impression (indicate recommendations for cleaning based on finding of WTC dust):

KEY: NP = not present; NF = not found; I = inaccessible; U = unknown