



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

A handwritten signature in black ink, appearing to read "John Anuforo".

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: <u>2/4/03</u>	Building contact name and phone:
Evaluation team (list name and affiliation):	
	(Environmental professional)
<u>TONY GALLO - DUCT DUSTERS</u>	(HVAC professional)
Building address:	Type of Facility (check all that apply):
<u>50 WARREN ST</u>	☒ Residential
	☐ Multi-use
	☐ Other (describe)
Date of construction:	
Number of residential units:	Number of floors: <u>5</u>
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	Mechanical exhaust system
Est. no. of units <u>1</u>	Est. no. of units <u>1</u>
Mechanical make-up air system	Passive shaft/duct
Est. no. of units	Est. no. of units <u>8</u>
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

Page 1 of 2

Ventilation System Identification:

LOBBY A/C

Location:

LOBBY - APPT

PII

Area Served:

LOBBY

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

Outside air intake:

Location:

Accessible for inspection? Y ___ N ___ (explain):

louvers, grates and/or screens

outside air duct

outside air damper(s)

Air handling unit:

outside air mixing chamber

filter rack(s)

filter media

blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators

blower housing acoustical lining

pre-heat coils

heating coils

cooling coils

re-heat coils

condensate drain pan

supply air plenum

supply air plenum damper(s)

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

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

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

Return air plenum Est. total RA plenum areas 1 No. locations inspected 1

Return air plenum damper Est. total qty inspected No. locations inspected

Accessible in-line fire dampers Est. total qty locations inspected

NP

NP

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

2.1 Central Ventilation System Visual Inspection Form

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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 § not present § not found § inaccessible
Other (specify): φ			
Other Information: Filter loading (light, moderate, heavy): <u>NORMAL</u> 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

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Mechanical Exhaust System Identification: <u>BOILER RM AIR INTAKE</u>			
Location: <u>ROOF</u>		Area Served: <u>BOILER RM</u>	
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 ☐ not present ☐ not found ☐ inaccessible
Exhaust air outlet: Location: <u> </u>			
Accessible for inspection? Y ☒ N ☐ (explain): <u> </u>		<u>Y</u>	<u>Y</u>
louvers, grates and/or screens		<u>Y</u>	<u>Y</u>
outside air duct		<u>Y</u>	<u>Y</u>
outside air damper(s)			<u>NP</u>
Exhaust fan unit:			
blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators		<u>Y</u>	<u>Y</u>
blower housing acoustical lining			<u>NP</u>
vibration collars			<u>NP</u>
Exhaust air distribution:			
Exhaust air ducts inspected <u>2</u> Est. total in ft <u>50</u> No. locations <u> </u>			
Specify type (circle): <u>metal</u> fibrous glass lined metal masonry fibrous glass board flex-duct wood		<u>Y</u>	<u>Y</u>
Accessible in-line fire dampers Est. total qty <u> </u> No. locations inspected <u> </u>			<u>NP</u>
Accessible turning vanes Est. total qty <u> </u> No. locations inspected <u> </u>			<u>NP</u>
Exhaust air grilles Est. total qty <u>1</u> No. locations inspected <u>1</u>		<u>Y</u>	<u>Y</u>
Other (specify): <u> </u>			
Other Information: <u> </u>			
General impression (indicate recommendations for cleaning based on finding of WTC dust): <u>WTC DUST FOUND IN SYSTEM. CLEANING IS RECOMMENDED.</u>			
KEY: NP = not present; NF = not found; I = inaccessible; U = unknown			

2.4 Passive Shaft/Duct Visual Inspection Form

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Passive Shaft/Duct Identification: <u># 1</u>			
Location: <u>Roof</u>		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 ☐ not present ☐ not found ☐ 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: <u>Roof</u>			
Accessible for inspection? Y ☒ N ☐ (explain):		<u>Y</u>	<u>N</u>
louvers, grates, screens or weather cap		<u>Y</u>	<u>N</u>
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty _____ No. locations inspected _____ Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>			
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 <u>5</u> No. locations inspected <u>1</u> Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>		<u>Y</u>	<u>N</u>
Accessible fire dampers Est. total qty _____ No. locations inspected _____			<u>NP</u>
Pipes/mechanical equipment, etc. located in shaft			<u>NP</u>
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

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Passive Shaft/Duct Identification: <u>#2</u>			
Location: <u>Roof</u>		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 X not present X not found X 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: <u>Roof</u>			
Accessible for inspection? Y ☒ N ___ (explain):		<u>Y</u>	<u>N</u>
louvers, grates, screens or weather cap		<u>Y</u>	<u>N</u>
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty _____ No. locations inspected _____ Specify shaft substrate (circle): <u>metal</u> 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		<u>P</u>	
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty <u>5</u> No. locations inspected <u>1</u> Specify shaft substrate (circle): <u>metal</u> fibrous glass lined metal masonry fibrous glass board flex-duct wood		<u>Y</u>	<u>N</u>
Accessible fire dampers Est. total qty _____ No. locations inspected _____ Pipes/mechanical equipment, etc. located in shaft			<u>NP</u>
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

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Passive Shaft/Duct Identification: <u>#3</u>			
Location: <u>Roof</u>		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 X not present X not found X inaccessible
Outside air intake (if servicing supply air): Location:			
Accessible for inspection? Y ___ N ___ (explain): <u>4</u>			
<u>louvers, grates, screens or weather cap</u>			
Exhaust outlet/louver (if servicing exhaust air): Location: <u>Roof</u>			
Accessible for inspection? Y ___ N ___ (explain):	<u>Y</u>	<u>N</u>	
<u>louvers, grates, screens or weather cap</u>	<u>Y</u>	<u>N</u>	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty _____ No. locations inspected _____ Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>			
Accessible fire dampers Est. total qty _____ No. locations inspected _____			
Pipes/mechanical equipment, etc. located in shaft	<u>P</u>		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty <u>5</u> No. locations inspected <u>1</u> Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>	<u>Y</u>	<u>N</u>	
Accessible fire dampers Est. total qty _____ No. locations inspected _____			<u>NP</u>
Pipes/mechanical equipment, etc. located in shaft			<u>NP</u>
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

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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 ☒ not present ☒ not found ☒ 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): 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): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>		Y	N
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 <u>5</u> No. locations inspected <u>1</u> Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>		Y	N
Accessible fire dampers Est. total qty _____ No. locations inspected _____ Pipes/mechanical equipment, etc. located in shaft			NP 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

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Passive Shaft/Duct Identification: <u>#5</u>			
Location: <u>Roof</u>		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 X not present X not found X inaccessible
Outside air intake (if servicing supply air): Location: <u>Roof</u> Accessible for inspection? Y ___ N ___ (explain): louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: <u>Roof</u> Accessible for inspection? Y ☒ N ___ (explain): 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): <u>metal</u> fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
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 <u>5</u> No. locations inspected <u>1</u> Specify shaft substrate (circle): <u>metal</u> fibrous glass lined metal masonry fibrous glass board flex-duct wood	Y	N	
Accessible fire dampers Est. total qty _____ No. locations inspected _____ Pipes/mechanical equipment, etc. located in shaft			NP 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

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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 X not present X not found X 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):		 	
louvers, grates, screens or weather cap		 	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty No. locations inspected Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>			
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): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>		 	
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

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Passive Shaft/Duct Identification: <u>#7</u>			
Location: <u>Roof</u>		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 § not present § not found § inaccessible
Outside air intake (if servicing supply air): Location: <u>[]</u>			
Accessible for inspection? Y <u>N</u> (explain):		<u>[]</u>	<u>[]</u>
louvers, grates, screens or weather cap			
Exhaust outlet/louver (if servicing exhaust air): Location: <u>Roof</u>			
Accessible for inspection? Y <u>✓</u> N (explain):		<u>Y</u>	<u>N</u>
louvers, grates, screens or weather cap		<u>Y</u>	<u>N</u>
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty _____ No. locations inspected _____ Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>			
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 <u>5</u> No. locations inspected <u>1</u> Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>		<u>Y</u>	<u>N</u>
Accessible fire dampers Est. total qty _____ No. locations inspected _____			<u>NP</u>
Pipes/mechanical equipment, etc. located in shaft			<u>NP</u>
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

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Passive Shaft/Duct Identification: <u>#8</u>			
Location: <u>Roof</u>		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 X not present X not found X 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: <u>Roof</u>			
Accessible for inspection? Y ☒ N ___ (explain):	<u>Y</u>	<u>N</u>	
louvers, grates, screens or weather cap	<u>Y</u>	<u>N</u>	
Supply air distribution (if servicing supply air): Supply air outlet(s) Est. total qty _____ No. locations inspected _____ Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>			
Accessible fire dampers Est. total qty _____ No. locations inspected _____			
Pipes/mechanical equipment, etc. located in shaft	<u>P</u>		
Return air distribution (if servicing exhaust air): Exhaust air inlet(s) Est. total qty <u>5</u> No. locations inspected <u>1</u> Specify shaft substrate (circle): <u>metal</u> <u>fibrous glass lined metal</u> <u>masonry</u> <u>fibrous glass board</u> <u>flex-duct</u> <u>wood</u>	<u>Y</u>	<u>N</u>	
Accessible fire dampers Est. total qty _____ No. locations inspected _____			<u>NP</u>
Pipes/mechanical equipment, etc. located in shaft			<u>NP</u>
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