NYC 9/11 Public Portal Document

23 BS-3 (Rev. 11/78)
180M-0-125 034

# RECEIVING REPORT

THE CITY OF NEW YORK
DEPARTMENT OF GENERAL SERVICES
DIVISION OF MUNICIPAL SUPPLIES

**NOTE TO AGENCY SUBMITTING RECEIVING REPORTS:** THIS REPORT IS TO BE COMPLETED IMMEDIATELY UPON DELIVERY. THE NO. 1 COPY IS TO BE SENT TO THE BUREAU OF QUALITY ASSURANCE. THE NO. 2, 3, 4 COPIES ARE TO BE UTILIZED FOR AUDIT AND ACCOUNTING PURPOSES AND SHOULD BE DISTRIBUTED AS DIRECTED WITHIN YOUR OWN AGENCY.

SHADED AREAS FOR THE USE OF DIV. OF MUNICIPAL SUPPLIES

| DATE PREPARED | RECEIVED BY / STOREHOUSE | AGENCY AND UNIT / ADDRESS | OMPA OR CONTRACT NO. | ORDER NO. | SHIPPING INSTR NO | RECEIVING REPORT NO |
|---|---|---|---|---|---|---|
| 5/20/02 | | DEP BEC | | CT 826 20 | 030019825 | |

RECEIVED FROM: NAME OF SELLER (VENDOR): TAMS CONSULTANTS INC

BILL OF LADING/ DEL. TICKET NO.:

CHECK ONE: THIS IS A
- [x] PARTIAL DELIVERY (MORE DELIVERIES DUE ON SAME ORDER)
- [ ] FINAL DELIVERY

| ITEM NO | STOREHOUSE COMMODITY CODE | DESCRIPTION INCL. CATALOG NUMBER, IF ANY | RECEIVED: STOREHOUSE DATA QUANTITY | UNIT | UNIT PRICE | PURCHASING DATA QUANTITY | UNIT | UNIT PRICE | TOTAL COST |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | Invoice# 1 invoice March 17,2003 | | | | | | | |
| | | to April 13,2003 HVAC consulting | | | | | | | |
| | | Services for WTC. | | | | | | | 15,840.00 |

DATE MATERIAL RECEIVED 3/17/03 - 4/13/03

I certify that I have received the material specified above and that this certification is correct as to quantity.

SIGNATURE [illegible] TEL. NO.

I certify that I have inspected and have accepted, with any exceptions noted, the material specified above.

SIGNATURE [illegible] DATE 5/1/03
Inspector, Div. of Municipal Supplies

4 - RECEIVING AGENCY COPY

NYC-WTC_000135765

NYC-WTC_000135766

NYC 9/11 Public Portal Document

WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 03/23/03

NAME: **Rock Antonios**

| JOB NO. | JOB DESCRIPTION | M 17-Mar | T 18-Mar | W 19-Mar | TH 20-Mar | F 21-Mar | S 22-Mar | SU 23-Mar | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | 2.0 | | 2.0 | | | 4.0 | |
| 66207 0001 | Site Visit | | | | | | | | 0.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 4.0 |
| 66207 0002 | Preparation | | | | 2.0 | | | | 2.0 | |
| 66207 0002 | Office Work | | | | | 3.0 | | | 3.0 | |
| 66207 0002 | Summary of Visits | | | | | | | | 0.0 | |
| | | | | | | | | | Office Total | 5.0 |
| | | | | | | | | | Week Total | 9.0 |

EMPLOYEE'S SIGNATURE: R Antonios APPROVED BY: R Antonios

WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 3/30/03

NAME: **Rock Antonios**

| JOB NO. | JOB DESCRIPTION | M 24-Mar | T 25-Mar | W 26-Mar | TH 27-Mar | F 28-Mar | S 29-Mar | SU 30-Mar | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | | 3.0 | 4.0 | 4.0 | 4.0 | | | 15.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 15.0 |
| 66207 0002 | Preparation | 1.0 | 2.0 | 1.0 | 1.0 | | | | 5.0 | |
| 66207 0002 | Office Work | | | 1.0 | | | | | 1.0 | |
| 66207 0002 | Summary of Visits | | | 1.0 | | 1.0 | | | 2.0 | |
| | | | | | | | | | Office Total | 8.0 |
| | | | | | | | | | Week Total | 23.0 |

EMPLOYEE'S SIGNATURE: R Antonios APPROVED BY: R Antonios

Two Week Total 32.0 HRS

NYC-WTC_000135767

NYC 9/11 Public Portal Document

WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 03/23/03

NAME: **Seth Levine**

| JOB NO. | JOB DESCRIPTION | M 17-Mar | T 18-Mar | W 19-Mar | TH 20-Mar | F 21-Mar | S 22-Mar | SU 23-Mar | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | 2.0 | | 2.0 | | | 4.0 | |
| 66207 0001 | Site Visit | | | | | | | | 0.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 4.0 |
| 66207 0002 | Preparation | | | | 2.0 | | | | 2.0 | |
| 66207 0002 | Office Work | | | | | 2.0 | | | 2.0 | |
| 66207 0002 | Summary of Visits | | | | | | | | 0.0 | |
| | | | | | | | | | Office Total | 4.0 |
| | | | | | | | | | Week Total | 8.0 |

EMPLOYEE'S SIGNATURE: Seth Levine APPROVED BY: [signature]

WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 3/30/03

NAME: **Seth Levine**

| JOB NO. | JOB DESCRIPTION | M 24-Mar | T 25-Mar | W 26-Mar | TH 27-Mar | F 28-Mar | S 29-Mar | SU 30-Mar | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | | 3.0 | 4.0 | 4.0 | 4.0 | | | 15.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 15.0 |
| 66207 0002 | Preparation | | 2.0 | | | | | | 2.0 | |
| 66207 0002 | Office Work | 2.0 | 1.0 | | | | | | 3.0 | |
| 66207 0002 | Summary of Visits | | 1.0 | 3.0 | | | | | 4.0 | |
| | | | | | | | | | Office Total | 9.0 |
| | | | | | | | | | Week Total | 24.0 |

EMPLOYEE'S SIGNATURE: Seth Levine APPROVED BY: [signature]

Two Week Total 32.0 HRS

NYC-WTC_000135768

NYC 9/11 Public Portal Document

NAME: **Rock Antonios**

**WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 04/06/03**

| JOB NO. | JOB DESCRIPTION | M | T | W | TH | F | S | SU | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 31-Mar | 1-Apr | 2-Apr | 3-Apr | 4-Apr | 5-Apr | 6-Apr | | |
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | 2.0 | | 4.0 | 4.0 | | | | 10.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 10.0 |
| 66207 0002 | Preparation | | 1.0 | 1.0 | | 1.0 | | | 3.0 | |
| 66207 0002 | Office Work | | | | | | | | 0.0 | |
| 66207 0002 | Summary of Visits | | 2.0 | | | 1.0 | | | 3.0 | |
| | | | | | | | | | Office Total | 6.0 |
| | | | | | | | | | Week Total | 16.0 |

**EMPLOYEE'S SIGNATURE:** [signature] **APPROVED BY:** [signature]

NAME: **Rock Antonios**

**WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 4/13/03**

| JOB NO. | JOB DESCRIPTION | M | T | W | TH | F | S | SU | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 7-Apr | 8-Apr | 9-Apr | 10-Apr | 11-Apr | 12-Apr | 13-Apr | | |
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | | 5.0 | 5.0 | 5.0 | | | | 15.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 15.0 |
| 66207 0002 | Preparation | | | | | | | | 0.0 | |
| 66207 0002 | Office Work | 1.0 | | | | 2.0 | | | 3.0 | |
| 66207 0002 | Summary of Visits | 2.0 | | | | 2.0 | | | 4.0 | |
| | | | | | | | | | Office Total | 7.0 |
| | | | | | | | | | Week Total | 22.0 |

**EMPLOYEE'S SIGNATURE:** [signature] **APPROVED BY:** [signature]

**Two Week Total** 38.0 HRS

NYC-WTC_000135769

NYC 9/11 Public Portal Document

*

NAME: Seth Levine

WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 04/06/03

| JOB NO. | JOB DESCRIPTION | M | T | W | TH | F | S | SU | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 31-Mar | 1-Apr | 2-Apr | 3-Apr | 4-Apr | 5-Apr | 6-Apr | | |
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | 2.0 | | 4.0 | 4.0 | | | | 10.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 10.0 |
| 66207 0002 | Preparation | 1.0 | | 1.0 | 1.0 | | | | 3.0 | |
| 66207 0002 | Office Work | | | | 1.0 | 1.0 | | | 2.0 | |
| 66207 0002 | Summary of Visits | | | 1.0 | | 1.0 | | | 2.0 | |
| | | | | | | | | | Office Total | 7.0 |
| | | | | | | | | | Week Total | 17.0 |

EMPLOYEE'S SIGNATURE: APPROVED BY:

NAME: Seth Levine

WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 4/13/03

| JOB NO. | JOB DESCRIPTION | M | T | W | TH | F | S | SU | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 7-Apr | 8-Apr | 9-Apr | 10-Apr | 11-Apr | 12-Apr | 13-Apr | | |
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | | 5.0 | 5.0 | 5.0 | | | | 15.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 15.0 |
| 66207 0002 | Preparation | | 1.0 | | 1.0 | | | | 2.0 | |
| 66207 0002 | Office Work | 1.0 | | | | 1.0 | | | 2.0 | |
| 66207 0002 | Summary of Visits | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | | | 6.0 | |
| | | | | | | | | | Office Total | 10.0 |
| | | | | | | | | | Week Total | 25.0 |

EMPLOYEE'S SIGNATURE: APPROVED BY:

Two Week Total 42.0 HRS

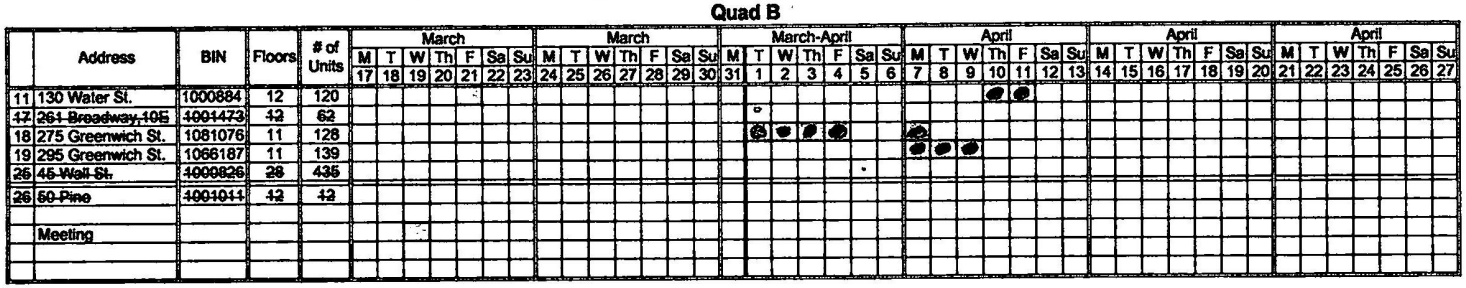
NYC-WTC_000135770

NYC 9/11 Public Portal Document

# WTC HVAC Consulting 2003 TAMS EARTH TECH - Schedule of Work

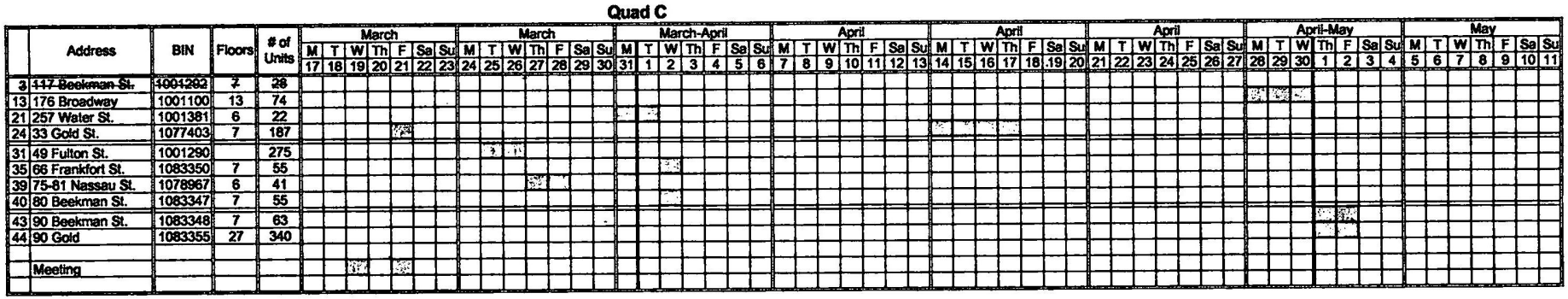
## Quad B

| | Address | BIN | Floors | # of Units |
|---|---|---|---|---|
| 11 | 130 Water St. | 1000884 | 12 | 120 |
| ~~17~~ | ~~261 Broadway,105~~ | ~~1001473~~ | ~~12~~ | ~~62~~ |
| 18 | 275 Greenwich St. | 1081076 | 11 | 128 |
| 19 | 295 Greenwich St. | 1066187 | 11 | 139 |
| ~~26~~ | ~~45 Wall St.~~ | ~~1000826~~ | ~~28~~ | ~~435~~ |
| ~~26~~ | ~~50 Pine~~ | ~~1001011~~ | ~~12~~ | ~~12~~ |
| | Meeting | | | |



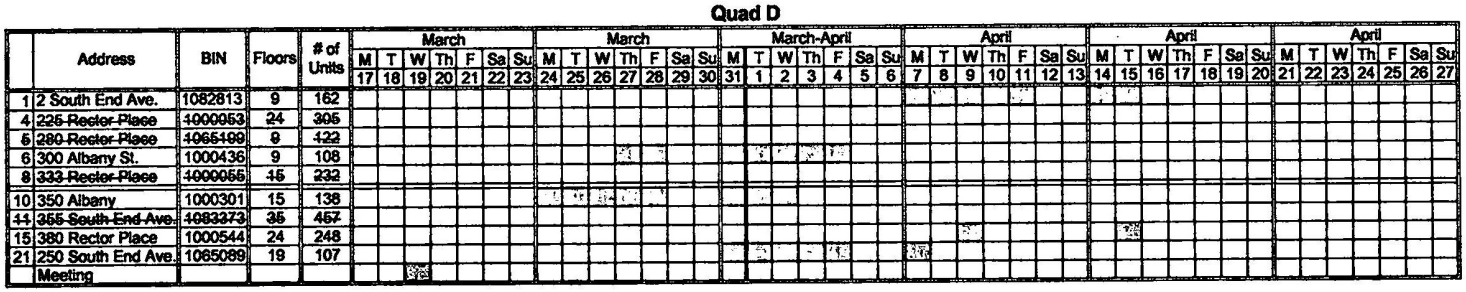

## Quad C

| | Address | BIN | Floors | # of Units |
|---|---|---|---|---|
| ~~3~~ | ~~117 Beekman St.~~ | ~~1001292~~ | ~~7~~ | ~~28~~ |
| 13 | 176 Broadway | 1001100 | 13 | 74 |
| 21 | 257 Water St. | 1001381 | 6 | 22 |
| 24 | 33 Gold St. | 1077403 | 7 | 187 |
| 31 | 49 Fulton St. | 1001290 | | 275 |
| 35 | 66 Frankfort St. | 1083350 | 7 | 55 |
| 39 | 75-81 Nassau St. | 1078967 | 6 | 41 |
| 40 | 80 Beekman St. | 1083347 | 7 | 55 |
| 43 | 90 Beekman St. | 1083348 | 7 | 63 |
| 44 | 90 Gold | 1083355 | 27 | 340 |
| | Meeting | | | |




## Quad D

| | Address | BIN | Floors | # of Units |
|---|---|---|---|---|
| 1 | 2 South End Ave. | 1082813 | 9 | 162 |
| 4 | ~~225 Rector Place~~ | ~~1000053~~ | ~~24~~ | ~~305~~ |
| ~~5~~ | ~~280 Rector Place~~ | ~~1065199~~ | ~~9~~ | ~~122~~ |
| 6 | 300 Albany St. | 1000436 | 9 | 108 |
| ~~8~~ | ~~333 Rector Place~~ | ~~1000055~~ | ~~15~~ | ~~232~~ |
| 10 | 350 Albany | 1000301 | 15 | 138 |
| ~~11~~ | ~~355 South End Ave.~~ | ~~1083373~~ | ~~35~~ | ~~457~~ |
| 15 | 380 Rector Place | 1000544 | 24 | 248 |
| 21 | 250 South End Ave. | 1065089 | 19 | 107 |
| | Meeting | | | |



NYC 9/11 Public Portal Document

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Appendix 1 – WTC Indoor Dust Cleaning Program Exhaust System Cleaning Procedures
WTC Indoor Dust Cleaning Program AC/Ventilation System Cleaning Procedures

Appendix 2 - WTC HVAC Cleaning Unit Prices Quad B&D
WTC HVAC Cleaning Unit Prices Quad C

Appendix 3 - WTC HVAC Consulting 2003 TAMS Earth Tech Schedule of Work

Appendix 4 – 130 Water St. Inspection Report

Appendix 5 - 275 Greenwich St. Inspection Report

Appendix 6 - 295 Greenwich St. Inspection Report

Appendix 7 - 257 Water St. Inspection Report

Appendix 8 - 49 Fulton St. Inspection Report

Appendix 9 – 66 Frankfort St. Inspection Report

Appendix 10 - 75-81 Nassau St. Inspection Report

Appendix 11 - 80 Beekman St. Inspection Report

Appendix 12 – 2 South End Ave. Inspection Report

Appendix 13 – 300 Albany St. Inspection Report

Appendix 14 - 350 Albany St. Inspection Report

Appendix 15 – 380 Rector Pl. Inspection Report

Appendix 16 - 250 South End Ave. Inspection Report

Appendix 17 - WTC HVAC Consulting Quad B Summary of Visits
WTC HVAC Consulting Quad C Summary of Visits
WTC HVAC Consulting Quad D Summary of Visits

NYC-WTC_000135772

NYC 9/11 Public Portal Document

**BREAKDOWN OF WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 03/23/03**

NAME: **Rock Antonios**

| JOB NO. | JOB DESCRIPTION | M | T | W | TH | F | S | SU | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 17-Mar | 18-Mar | 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | | |
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting EPA Office - 290 Broadway | | | 2.0 | | 2.0 | | | 4.0 | |
| 66207 0001 | Site Visit | | | | | | | | 0.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 4.0 |
| 66207 0002 | Preparation | | | | Appendix 1 2.0 | | | | 2.0 | |
| 66207 0002 | Office Work: Invoicing, Coordinating, Scheduling, Phone Conversations | | | | | Appendix 2,3 3.0 | | | 3.0 | |
| 66207 0002 | Summary of Visits | | | | | | | | 0.0 | |
| | | | | | | | | | Office Total | 5.0 |
| | | | | | | | | | Week Total | 9.0 |

**BREAKDOWN OF WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 3/30/03**

NAME: **Rock Antonios**

| JOB NO. | JOB DESCRIPTION | M | T | W | TH | F | S | SU | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 24-Mar | 25-Mar | 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | | |
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | | 3.0 | 4.0 | 4.0 | 4.0 | | | 15.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 15.0 |
| 66207 0002 | Preparation | Appendix 2,3 1.0 | App. 8, 10 2.0 | Appendix 14 1.0 | App. 7,13 1.0 | | | | 5.0 | |
| 66207 0002 | Office Work: Invoicing, Coordinating, Scheduling, Phone Conversations | | | 1.0 | | | | | 1.0 | |
| 66207 0002 | Summary of Visits Apendix 19 | | | 1.0 | | 1.0 | | | 2.0 | |
| | | | | | | | | | Office Total | 8.0 |
| | | | | | | | | | Week Total | 23.0 |

**Two Week Total** 32.0 HRS

NYC-WTC_000135773

NYC 9/11 Public Portal Document

## BREAKDOWN OF WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 03/23/03

NAME: Seth Levine

| JOB NO. | JOB DESCRIPTION | M 17-Mar | T 18-Mar | W 19-Mar | TH 20-Mar | F 21-Mar | S 22-Mar | SU 23-Mar | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting EPA Office - 290 Broadway | | | 2.0 | | 2.0 | | | 4.0 | |
| 66207 0001 | Site Visit | | | | | | | | 0.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 4.0 |
| 66207 0002 | Preparation | | | | Appendix 1 2.0 | | | | 2.0 | |
| 66207 0002 | Office Work: Invoicing, Coordinating, Scheduling, Phone Conversations | | | | | Appendix 2,3 2.0 | | | 2.0 | |
| 66207 0002 | Summary of Visits | | | | | | | | 0.0 | |
| | | | | | | | | | Office Total | 4.0 |
| | | | | | | | | | Week Total | 8.0 |

## BREAKDOWN OF WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 3/30/03

NAME: Seth Levine

| JOB NO. | JOB DESCRIPTION | M 24-Mar | T 25-Mar | W 26-Mar | TH 27-Mar | F 28-Mar | S 29-Mar | SU 30-Mar | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | | 3.0 | 4.0 | 4.0 | 4.0 | | | 15.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 15.0 |
| 66207 0002 | Preparation | | App. 8, 10 2.0 | | | | | | 2.0 | |
| 66207 0002 | Office Work: Invoicing, Coordinating, Scheduling, Phone Conversations | 2.0 | 1.0 | | | | | | 3.0 | |
| 66207 0002 | Summary of Visits Apendix 19 | | 1.0 | 3.0 | | | | | 4.0 | |
| | | | | | | | | | Office Total | 9.0 |
| | | | | | | | | | Week Total | 24.0 |

Two Week Total 32.0 HRS

NYC-WTC_000135774

NYC 9/11 Public Portal Document

**BREAKDOWN OF WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 04/06/03**

NAME: Rock Antonios

| JOB NO. | JOB DESCRIPTION | M 31-Mar | T 1-Apr | W 2-Apr | TH 3-Apr | F 4-Apr | S 5-Apr | SU 6-Apr | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | 2.0 | | 4.0 | 4.0 | | | | 10.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 10.0 |
| 66207 0002 | Preparation | | Appendix 18 1.0 | Appendix 5 1.0 | | Appendix 6 1.0 | | | 3.0 | |
| 66207 0002 | Office Work: Invoicing, Coordinating, Scheduling, Phone Conversations | | | | | | | | 0.0 | |
| 66207 0002 | Summary of Visits Apendix 19 | | 2.0 | | | 1.0 | | | 3.0 | |
| | | | | | | | | | Office Total | 6.0 |
| | | | | | | | | | Week Total | 16.0 |

**BREAKDOWN OF WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 4/13/03**

NAME: Rock Antonios

| JOB NO. | JOB DESCRIPTION | M 7-Apr | T 8-Apr | W 9-Apr | TH 10-Apr | F 11-Apr | S 12-Apr | SU 13-Apr | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | | 5.0 | 5.0 | 5.0 | | | | 15.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 15.0 |
| 66207 0002 | Preparation | | | | | | | | 0.0 | |
| 66207 0002 | Office Work: Invoicing, Coordinating, Scheduling, Phone Conversations | 1.0 | | | | 2.0 | | | 3.0 | |
| 66207 0002 | Summary of Visits Apendix 19 | 2.0 | | | | 2.0 | | | 4.0 | |
| | | | | | | | | | Office Total | 7.0 |
| | | | | | | | | | Week Total | 22.0 |

Two Week Total 38.0 HRS

NYC-WTC_000135775

NYC 9/11 Public Portal Document

NAME: Seth Levine

BREAKDOWN OF WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 04/06/03

| JOB NO. | JOB DESCRIPTION | M | T | W | TH | F | S | SU | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 31-Mar | 1-Apr | 2-Apr | 3-Apr | 4-Apr | 5-Apr | 6-Apr | | |
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | 2.0 | | 4.0 | 4.0 | | | | 10.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 10.0 |
| 66207 0002 | Preparation | Appendix 16 1.0 | | App. 9,11 1.0 | Appendix 6 1.0 | | | | 3.0 | |
| 66207 0002 | Office Work: Invoicing, Coordinating, Scheduling, Phone Conversations | | | | 1.0 | 1.0 | | | 2.0 | |
| 66207 0002 | Summary of Visits Apendix 19 | | | 1.0 | | 1.0 | | | 2.0 | |
| | | | | | | | | | Office Total | 7.0 |
| | | | | | | | | | Week Total | 17.0 |

NAME: Seth Levine

BREAKDOWN OF WEEKLY TIME SHEET PERIOD ENDING SUNDAY, 4/13/03

| JOB NO. | JOB DESCRIPTION | M | T | W | TH | F | S | SU | TOTAL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 7-Apr | 8-Apr | 9-Apr | 10-Apr | 11-Apr | 12-Apr | 13-Apr | | |
| | **Field** | | | | | | | | | |
| 66207 0001 | Meeting | | | | | | | | 0.0 | |
| 66207 0001 | Site Visit | | 5.0 | 5.0 | 5.0 | | | | 15.0 | |
| 66207 0001 | Technical Support | | | | | | | | 0.0 | |
| | **Office** | | | | | | | | Field Total | 15.0 |
| 66207 0002 | Preparation | | App. 5,12,15 1.0 | | Appendix 4 1.0 | | | | 2.0 | |
| 66207 0002 | Office Work: Invoicing, Coordinating, Scheduling, Phone Conversations | 1.0 | | | | 1.0 | | | 2.0 | |
| 66207 0002 | Summary of Visits Apendix 19 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | | | 6.0 | |
| | | | | | | | | | Office Total | 10.0 |
| | | | | | | | | | Week Total | 25.0 |

Two Week Total 42.0 HRS

# BREAKDOWN OF WTC HVAC Consulting 2003 TAMS EARTH TECH - S
## Hours of Site Visits for Invoice #1 April 16, 2003
## Billing Period March 17 Through April 13

### Quad B

| | Address | BIN | Floors | # of Units | March | | | | | | | March | | | | | | | March-April | | | | | | | April | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa |
| | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 11 | 130 Water St. | 1000884 | 12 | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ~~17~~ | ~~261 Broadway,10E~~ | ~~1001473~~ | ~~12~~ | ~~62~~ | | | | | | | | | | | | | | | | | | | | | | | | | 5 | | |
| 18 | 275 Greenwich St. | 1081076 | 11 | 128 | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | |
| 19 | 295 Greenwich St. | 1066187 | 11 | 139 | | | | | | | | | | | | | | | | | | | | | | | 5 | 2 | | | |
| ~~25~~ | ~~45 Wall St.~~ | ~~1000826~~ | ~~28~~ | ~~435~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ~~26~~ | ~~50 Pine~~ | ~~1001011~~ | ~~12~~ | ~~12~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Meeting | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Percentage of Hours Spent on Quad B 20%

### Quad C

| | Address | BIN | Floors | # of Units | March | | | | | | | March | | | | | | | March-April | | | | | | | April | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa |
| | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| ~~3~~ | ~~117 Beekman St.~~ | ~~1001292~~ | ~~7~~ | ~~28~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 176 Broadway | 1001100 | 13 | 74 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | 257 Water St. | 1001381 | 6 | 22 | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| 24 | 33 Gold St. | 1077403 | 7 | 187 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | 49 Fulton St. | 1001290 | | 275 | | | | | | | | | 6 | 4 | | | | | | | | | | | | | | | | | |
| 35 | 66 Frankfort St. | 1083350 | 7 | 55 | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | |
| 39 | 75-81 Nassau St. | 1078967 | 6 | 41 | | | | | | | | | | | | 5 | | | | | | | | | | | | | | | |
| 40 | 80 Beekman St. | 1083347 | 7 | 55 | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | |
| 43 | ~~90 Beekman St.~~ | ~~1083348~~ | ~~7~~ | ~~63~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 44 | ~~90 Gold~~ | ~~1083355~~ | ~~27~~ | ~~340~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Meeting | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Percentage of Hours Spent on Quad C 26%

### Quad D

| | Address | BIN | Floors | # of Units | March | | | | | | | March | | | | | | | March-April | | | | | | | April | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa |
| | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | 2 South End Ave. | 1082813 | 9 | 162 | | | | | | | | | | | | | | | | | | | | | | | 5 | 4 | 5 | | |
| 4 | ~~225 Rector Place~~ | ~~1000053~~ | ~~24~~ | ~~305~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ~~5~~ | ~~280 Rector Place~~ | ~~1065199~~ | ~~9~~ | ~~122~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 300 Albany St. | 1000436 | 9 | 108 | | | | | | | | | | | 4 | 3 | | | | | | 4 | | | | | | | | | |
| ~~8~~ | ~~333 Rector Place~~ | ~~1000055~~ | ~~15~~ | ~~232~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 350 Albany | 1000301 | 15 | 138 | | | | | | | | | | 4 | 4 | | | | | | | | | | | | | | | | |
| ~~11~~ | ~~355 South End Ave.~~ | ~~1083373~~ | ~~35~~ | ~~457~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 380 Rector Place | 1000544 | 24 | 248 | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | |
| 21 | 250 South End Ave. | 1065089 | 19 | 107 | | | | | | | | | | | | | | | 2 | | | 4 | | | | | | | | | |
| | Meeting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Percentage of Hours Spent on Quad D 54%

NYC 9/11 Public Portal Document

TAMS AN EARTH TECH
COMPANY

HVAC Consulting Services

# APPENDIX 1

*Invoice #1*

*Contract No. CT 826-200300-19825*
*OCA No. 0000425814*

NYC-WTC_000135777

NYC 9/11 Public Portal Document

# Appendix 1

NYC 9/11 Public Portal Document

# WTC Indoor Dust Cleaning Program
# Exhaust System Cleaning Procedures

Copy 1
Where

General

1. It is necessary to ensure that sufficient air velocity and/or negative pressure is maintained in the duct during cleaning, to prevent the dispersion of dust outside of the duct and to ensure that debris dislodged by mechanical cleaning devices is transported to a collection device. A HEPA filtered vacuum collection device shall be used to create negative pressure within the ductwork to be cleaned. The AFD or vacuum collection equipment shall be adequate to collect all dust and debris released by the cleaning process and shall be attached to the existing ductwork with air-tight connections and located to attain maximum collection efficiency. Smoke tubes or other equivalent methods will be used to verify that sufficient air velocity is maintained during cleaning.

2. Provisions must be made to prevent the release of dust or debris at access points that are disturbed by the cleaning activities. If the branch ducts are accessible (typically 6' or less in length from access point) it is not necessary to construct a temporary containment at the access point provided that a) they may be cleaned using HEPA vacuums with brush attachments and wet methods and b) negative pressure within the system is sufficient to provide a face velocity at the grille opening of 500 feet per minute. For larger branches (typically 6' or greater in length from access point) that require the use of mechanical devices such as whips, brushes, and compressed air, or where it is not possible to establish a face velocity at the grille opening of 500 feet per minute, construct a temporary containment (e.g., a "cube" or "cocoon" with flapped entrance) at the access point to provide protection against the release of dust. Containment is not required for air handling units located outdoors unless located near active air intakes. Smoke tubes or other equivalent methods will be used periodically throughout the cleaning process and during activities that create the greatest potential for worker exposure to verify that sufficient air velocity is maintained.

3. It is recommended that air filtration devices and vacuum collection equipment be exhausted to the outdoors unless special measures are taken to control the leakage of air contaminants from the exhaust of such equipment (see Procedures item 7).

Procedures

1. Identify the system to be cleaned including exhaust fan (e.g., "mushroom" fans), number and location of risers, and apartments or common spaces affected.

2. Determine how many floors on a riser will be cleaned as part of one continuous cleaning (5 – 10 floors).

3. Lock out and tag out the exhaust fan.

4. Attach a local capture, HEPA filtered, vacuum collection system to the riser to place the system under negative pressure. Polyethylene sheeting should be used to protect the floor underneath the vacuum collection equipment if located indoors.

5. Exhaust the vacuum collection system or AFD to the outdoors. If no window is available, a stairwell may be appropriate. Alternately, two vacuum collection systems or AFD's may be connected in series so that a second unit filters the exhaust air from the first. Alternately, the cleaning contractor can have the collection equipment leak tested in-place by an independent third party to ensure that contaminants do not leak through the air cleaning device.

6. Install one layer of 6 mil poly over all bathroom and kitchen exhaust grilles and secure in place with painters tape.

7. Insert and inflate isolation/zone pillows, as necessary to isolate system, so that floors beyond the cleaning scope area outside the work zone, and to maintain sufficient negative pressure in the section of the ventilation system being cleaned.

8. Remove the mushroom or other fan type housing or weather cap assembly from the roof mounting. Disregard this step if the mushroom was removed previously to install the vacuum collection system on the roof.

9. Disassemble and clean the mushroom, other fan type housing or weather cap assembly using HEPA vacuums with brush attachments and wet methods, as necessary to remove dust (any electrical equipment will not be cleaned with wet methods).

10. Clean the main riser using a combination of techniques including whips, brushes, and compressed air (note: compressed air may be used only if the system is sufficiently isolated and vacuum collection equipment is used to maintain a duct velocity of approximately 3000 feet per minute to capture and transport dislodged material). Cleaning of the riser should start at the furthest point from the AFD or collection device. Clean the riser prior to cleaning the associated branch ducts.

11. Reinstall the mushroom, other fan type housing or weather cap assembly once the riser or top zone is cleaned.

12. <u>For accessible branch ducts (typically 6' or less in length from access point)</u>: One by one, place an approximately 6' x 6' drop cloth of 6 mil polyethylene sheeting on the surfaces below each bathroom and kitchen exhaust grille. Check to ensure that the face velocity at the grille opening is 500 feet per minute or greater. Remove and clean each bathroom and kitchen exhaust grille inside the affected apartment. Clean all branch ducts from inside the apartment bathrooms and kitchens, using HEPA vacuums with brush attachments and wet methods. After cleaning, reinstall the bathroom or kitchen exhaust grille and cover again with polyethylene sheeting secured with painter's tape to help maintain negative pressure within the exhaust ventilation system before moving on to the next grille. Roll up the polyethylene sheeting protecting the surfaces below the exhaust vent and place in a 6 mil polyethylene bag for disposal as asbestos-containing waste.

13. <u>For inaccessible branch ducts (typically 6' or greater in length from access point)</u>: prior to inserting mechanical cleaning devices into the access point, construct a temporary containment (see General item 2) to contain the access point. Remove and clean the grille. Clean the branch duct using a combination of whips, brushes, and compressed air (note: compressed air may be used only if the system is sufficiently isolated and vacuum collection equipment is used to maintain a duct velocity of approximately 3000 feet per minute).

Use isolation/zone pillows as necessary to isolate sections of the system, so that sufficient negative pressure is maintained in each work zone and to prevent re-contamination of cleaned sections.

After cleaning, reinstall the bathroom or kitchen exhaust grille and cover again with polyethylene sheeting secured with painter's tape to help maintain negative pressure within the exhaust ventilation system before moving on to the next grille. HEPA vacuum or wet-wipe interior surfaces of the temporary containment prior to dismantling or moving to another location. Cleaning of the containment is a precautionary measure intended to minimize the potential for spreading dust or debris outside of the work area. Place all waste in 6 mil polyethylene bags for disposal as asbestos-containing waste.

14. Clean the bottom of the riser using a HEPA vacuum to collect any debris that has fallen to the bottom.

15. Disengage the local capture system and relocate to another section of the riser or to another riser.

15. Ensure that the occupant space is free of any debris associated with the duct cleaning process. Use HEPA vacuums and/or wet wiping to clean the space, as needed. Place waste and debris into 6 mil polyethylene bags for disposal as asbestos-containing waste. Waste and debris from cleaning operations will be handled as asbestos-containing waste as a precaution.

16. Perform all duct cleaning work in accordance with local, state and federal regulations.

17. All work will be accomplished by a DEP certified Asbestos Handlers.

18. All work will be supervised by a DEP certified Asbestos Handler Supervisor.

19. Workers will utilize ½face APR's equipped with P-100 filters, eye protection and full body coveralls during the cleaning process.

20. In most cases minimal dust accumulations were observed on components and the system has been in operation for over a year, large amounts of debris are not expected during dismantling and cleaning of the system components. All specified cleaning is being performed after the installation of negative pressure ventilation equipment and system isolation devices. To date, none of personal air samples collected during the indoor dust cleaning program exceeded 0.1 f/cc asbestos. Based on past personal monitoring results which was conducted during Scope A and Scope B cleanings, previous residential monitoring, the condition of the systems to be cleaned and the required engineering controls which contain and move dust within the ventilation system thereby keeping it away from the workers breathing zone, it is reasonable to expect that personal air samples will not exceed 0.1 f/cc. Based on the above, the work area will not be considered as regulated area. Based on the above, the work area will not be considered as regulated area. The cleaning contractor shall collect personal air samples on workers and submit the results of sampling within 48 hours to establish personal exposure data for this work. If large accumulations of dust or debris are observed during the work or personal air samples exceed 0.1 f/cc work practices and engineering controls will be reevaluated and revised accordingly.

NYC 9/11 Public Portal Document

Dep 21

# WTC Indoor Dust Cleaning Program
# AC/Ventilation System Cleaning Procedures

General

1. It is necessary to ensure that sufficient air velocity and/or negative pressure is maintained in the duct during cleaning, to prevent the dispersion of dust outside of the duct. A HEPA filtered vacuum collection device shall be used to create negative pressure within the ductwork to be cleaned. The AFD or vacuum collection equipment shall be adequate to collect all dust and debris released by the cleaning process and shall be attached to the existing ductwork with air-tight connections and located to attain maximum collection efficiency. Smoke tubes or other equivalent methods will be used to verify that sufficient air velocity is maintained during cleaning.

2. A temporary containment should be installed around the air handling units during cleaning to provide additional protection against the release of dust. Containment is not required for air handling units located outdoors unless located near active air intakes.

3. When cleaning the AC/ventilation system fan unit or other components, it is important that all components in contact with the air stream are cleaned. This procedure anticipates that once an air handling system has been selected for cleaning, all components, not just those with visible WTC dust, are cleaned.

4. Provisions must be made to prevent the release of dust or debris at access points that are disturbed by the cleaning activities. If the branch ducts are accessible (typically 6' or less in length from access point) it is not necessary to construct a temporary containment at the access point provided that a) they may be cleaned using HEPA vacuums with brush attachments and wet methods and b) negative pressure within the system is sufficient to provide a face velocity at the diffuser or grille opening of 500 feet per minute. For longer branches that require the use of mechanical devices such as whips, brushes, and compressed air, or where it is not possible to establish a face velocity at the diffuser or grille opening of 500 feet per minute, construct a temporary containment (e.g., a "cube" or "cocoon" with flapped entrance) at the access point to provide protection against the release of dust. Smoke tubes or other equivalent methods will be used periodically throughout the cleaning process and during activities that create the greatest potential for worker exposure to verify that sufficient air velocity is maintained.

5. It is recommended that air filtration devices and vacuum collection equipment be exhausted to the outdoors unless special measures are taken to control the leakage of air contaminants from the exhaust of such equipment (see Procedures item 7).

6. Note that porous interior duct insulation may be located in some of the AC/ventilation fan units or in ducts. Unless the insulation is protected by a metal screen, care must be taken to avoid damaging or tearing the insulation. For duct cleaning, soft rotary brushes, compressed air or HEPA vacuums may be used for cleaning. In AC/ventilation fan units, HEPA vacuums may be used for cleaning. After satisfactory cleaning of porous interior insulation, an appropriate encapsulant shall be applied to the porous surface.

Encapsulant coatings shall be for specific use in ventilation systems and applied per manufacturer's instructions including safety instructions. Encapsulant coatings shall be applied directly to the interior porous surfaces of AC/ventilation system components by hand brushing, rolling, or troweling, or via spray system, with a maximum distance of 24" from the spray discharge tip to the surface being treated. Encapsulant coatings may not be fogged into the system. A continuous film thickness should be achieved in treated areas, as per manufacturer's instructions. Encapsulants shall be water-based, with low VOC (volatile organic compound) emissions, and meet NFPA smoke development and flame spread requirements for ventilation system products. Encapsulant coatings shall be applied in accordance with applicable federal, state, or local regulations regarding the use of such products and MSDS copies for any encapsulant products used in the AC/ventilation system shall be available on-site.

Areas of damaged interior AC/ventilation system fan unit or duct insulation that is abraded or delaminated such that application of an encapsulant coating would be inappropriate as determined by the NADCA-certified ASCS should be removed in consultation with building management. Replacement of such insulation with an appropriate material shall be the responsibility of building management.

Procedures

1. Identify the system to be cleaned including outside air intake, fan unit, supply ducts and return ducts if appropriate.

2. Determine how the system will be segregated for cleaning; typically the fan unit will be cleaned separately from the ductwork unless the ductwork consists of very short runs on the same floor. Cleaning should start from the furthest point in the system and proceed towards the collection device.

3. Lock out and tag out the fan unit. Building management will be responsible for identify and disabling in-duct smoke detectors if present.

4. Attach a local capture, HEPA filtered, Air Filtration Device (AFD) or vacuum collection system to place the system under negative pressure. Sufficient negative pressure shall be maintained to prevent the dispersion of dust outside of the duct. Isolation/zone pillows shall be used as necessary to isolate sections of the system, so that sufficient negative pressure is maintained in each work zone.

5. Exhaust the AFD or vacuum collection system to the outdoors. If no window is available, a stairwell may be appropriate. Alternately, two AFD's or vacuum collection systems may be connected in series so that a second unit filters the exhaust air from the first. Alternately, the cleaning contractor can have the collection equipment leak tested in-place by an independent third party to ensure that contaminants do not leak through the air cleaning device.

6. Cover all open supply air grilles, supply diffusers, and return air grilles located in the affected ductwork using fire-retardant polyethylene sheeting or bags and duct tape or preservation tape.

7. Place the air handling units and their components under containment prior to beginning work. A temporary Zip-wall containment of 6-mil, fire retardant polyethylene sheeting extending from the floor to the ceiling deck, with a flapped entrance, and maintained

under negative pressure using a HEPA-filtered air filtration device is sufficient. The footprint of the containment should be large enough to accommodate a ladder or scaffolding if needed.

8. If there is an outside air intake, clean the intake louvers by damp wiping. If there is an outside air duct and it is accessible, clean the interior surfaces using HEPA vacuums with brush attachments and wet methods. If access to the outside air duct is limited, clean it using a combination of whips (whips only used in ducts without interior insulation), brushes (use soft brushes if ducts have interior insulation), and compressed air (note: compressed air may be used only if the system is sufficiently isolated and vacuum collection equipment is used to maintain a duct velocity of approximately 3000 feet per minute). Note that vertical risers may be treated similarly to the procedures identified for exhaust ducts.

9. Clean the air intake louvers and filter racks at the return air sides of the AC/ventilation units by damp wiping.

10. Clean all parts of the A/C or ventilation fan unit exposed to the air stream including thermal coils, the blower assembly and housing, and all other components using HEPA vacuum brush attachments and minimal wet methods. Electric coils and components shall be cleaned using dry methods. When wet cleaning thermal coils, apply manufacturer-approved cleaning solution to the coils using low pressure methods (i.e., airless sprayer, hand operated pump).

11. Clean all supply mains and branch ducts starting at the furthest point from the AFD or vacuum collection device. If the ducts are accessible (typically 6' or less in length from access point) they may be cleaned using HEPA vacuums with brush attachments and wet methods. If access to the ducts is limited (typically 6' or more in length from access point), clean them using a combination of whips (whips only used in ducts without interior insulation), brushes (use soft brushes if ducts have interior insulation), and compressed air (note: compressed air may be used only if the system is sufficiently isolated and vacuum collection equipment is used to maintain a duct velocity of approximately 3000 feet per minute).

    Use isolation/zone pillows as necessary to isolate sections of the system, so that sufficient negative pressure is maintained in each work zone and to prevent re-contamination of cleaned sections.

12. Apply encapsulant to any exposed porous insulation in the AC/ventilation system fan unit or ducts.

13. Protect the floor underneath the supply grilles/diffusers or return air grilles using 6 mil polyethylene sheeting. Remove the polyethylene barriers covering the supply air diffusers/grilles and return grilles, while the duct is still under negative pressure.

14. Remove supply air grilles and diffusers to a central location for cleaning. Clean using Simple Green or a similar environmentally safe product. Use bags if necessary when removing the grilles and/or diffusers to prevent dust or debris from being released. Reinstall supply grilles/diffusers and return air grilles after cleaning.

15. Air filters within the AC/ventilation system shall removed and disposed of. It shall be the responsibility of building management to provide replacement filters.

16. Disengage the local capture system and relocate to another section of the duct to be cleaned.

17. Prior to dismantling work area preparations, clean the interior walls of temporary containments using wet-wiping or HEPA vacuum methods. The cleaning of work area preparations is a precautionary measure intended to minimize the potential for spreading dust or debris outside of the work area.

18. Occupied areas or common areas in which fan unit cleaning is accomplished, will be cleaned as common spaces using the common space unit prices, immediately after the HVAC cleaning is complete.

19. Place waste and debris into 6 mil polyethylene bags for disposal as asbestos-containing waste. Waste and debris from cleaning operations will be handled as asbestos-containing waste as a precaution.

20. Perform all duct cleaning work in accordance with local, state and federal regulations.

21. All work will be accomplished by DEP certified Asbestos Handlers.

22. All work will be supervised by a DEP certified Asbestos Handler Supervisor.

23. All work will be overseen by a NADCA certified ASCS or equivalent.

24. Workers will utilize ½ face APR's equipped with P-100 filters, eye protection and full body coveralls during the cleaning process.

25. In most cases minimal dust accumulations were observed on components and the system has been in operation for over a year, large amounts of debris are not expected during dismantling and cleaning of the system components. All specified cleaning is being performed after the installation of negative pressure ventilation equipment and system isolation devices. To date, none of personal air samples collected during the indoor dust cleaning program exceeded 0.1 f/cc asbestos. Based on past personal monitoring results which was conducted during Scope A and Scope B cleanings, previous residential monitoring, the condition of the systems to be cleaned and the required engineering controls which contain and move dust within the ventilation system thereby keeping it away from the workers breathing zone, it is reasonable to expect that personal air samples will not exceed 0.1 f/cc. Based on the above, the work area will not be considered as regulated area. The cleaning contractor shall collect personal air samples on workers and submit the results of sampling within 48 hours to establish personal exposure data for this work. If large accumulations of dust or debris are observed during the work or personal air samples exceed 0.1 f/cc work practices and engineering controls will be reevaluated and revised accordingly.

NYC 9/11 Public Portal Document

HVAC Consulting Services

# APPENDIX 2

*Invoice #1*

Contract No. CT 826-200300-19825 OCA No. 0000425814



NYC-WTC_000135786

NYC-WTC_000135787

NYC 9/11 Public Portal Document

Wkat.

# WTC HVAC CLEANING UNIT PRICES Quad B & D

| No | ITEMS | UNIT PRICE | | VSEF* | |
|---|---|---|---|---|---|
| 1 | Tents | $ 500 | Each | | |
| 2 | Glovebags | $ 300 | Each | | |
| 3 | Exhaust (mushroom) fan unit(<500cfm) | $ 300 | Each | 2.2 | |
| 4 | Exhaust (mushroom) fan unit(500 - 1500cfm) | $ 400 | Each | 2.2 | |
| 5 | Exhaust (mushroom) fan unit(>1500 - 2500cfm) | $ 500 | Each | 2.2 | |
| 6 | Exhaust mushroom) fan unit(>2500cfm) | $ 600 | Each | 2.2 | |
| 7 | Exhaust Centrifugal Blower (<1000cfm) | $ 500 | Each | 2.2 | |
| 8 | Exhaust Centrifugal Blower (>1000 - 2000cfm) | $ 750 | Each | 2.2 | |
| 9 | Exhaust Centrifugal Blower (>2000cfm) | $ 1,000 | Each | 2.2 | |
| 10 | Exhaust Riser (Includes Cleaning Grills) | $ 200 | Per Floor | | |
| 11 | Exhaust Branch Riser - horizontal runs(<6 feet) | N/C | | | |
| 12 | Exhaust Branch Riser - horizontal runs(>6 feet) | $ 200 | Per 10 lin ft. increments | | |
| 13 | Air handling unit (<1000cfm) | $ 500 | Each | 2.1 | |
| 14 | Air handling unit (1000 - 2000cfm) | $ 750 | Each | 2.1 | |
| 15 | Air handling unit (>2000 - 3000cfm) | $ 1,000 | Each | 2.1 | |
| 16 | Package AC (< 5 Tons) | $ 1,000 | Each | 2.1 | |
| 17 | Package AC - each addditional 2.5 Tons | $ 500 | Each | 2.1 | |
| 18 | Mech. Make-up Air (< 1000 cfm) | $ 600 | | 2.3 | |
| 19 | Mech. Make-up Air (> 1000 cfm) | $ 900 | | 2.3 | |
| 20 | Horizontal Supply/Return Duct < 5sf cross section | $ 200 | Per 10 lin ft increments | 2.1 | |
| 21 | Horizontal Supply/Return Duct > 5sf cross section | $ 250 | Per 10 lin ft increments | 2.1 | |
| 22 | Supply/Return Riser < 5sf cross section | $ 200 | Per Floor | | includes diffusers & registers |
| 23 | Supply/Return Riser > 5sf cross section | $ 250 | Per Floor | | includes diffusers & registers |
| 24 | Encapsulation | $ 150 | Per 10 lf/sf incriments | | |
| 25 | Access Hatches | $ 50 | Each | | |
| 26 | Outside Air Duct | $ 200 | Per 10 lf incriments | 2.1 | |
| 27 | Outside Air Plenum | $ 5 | Per sf surface area | 2.1 | |
| 28 | Outside Air Intake Grill | $ 5 | Per sf | 2.1 | |
| 29 | Package HVAC - Through wall | $ 500 | Each | | |
| 30 | Baseboard Heeting Fins | $ 25 | Per lf | | |
| 31 | Scaffold Set Up | $ 100 | Per 5 ft section | | |

* VENTILATION SYSTEM EVALUATION FORM

2.1 Central Ventilation System Visual Inspection Form

2.2 Mechanical Exhaust System Visual Inspection Form

2.3Mechanical Make-up Air system Visual Inspection Form

NYC-WTC_000135788

NYC 9/11 Public Portal Document

What.

# WTC HVAC CLEANING UNIT PRICES

## Quad C

| No | ITEMS | UNIT PRICE | | VSEF* | |
|---|---|---|---|---|---|
| 1 | Tents | $ 450.00 | Each | | |
| 2 | Glovebags | $ 225.00 | Each | | |
| 3 | Exhaust (mushroom) fan unit(<500cfm) | $ 300.00 | Each | 2.2 | |
| 4 | Exhaust (mushroom) fan unit(500 - 1500cfm) | $ 350.00 | Each | 2.2 | |
| 5 | Exhaust (mushroom) fan unit(>1500 - 2500cfm) | $ 400.00 | Each | 2.2 | |
| 6 | Exhaust mushroom) fan unit(>2500cfm) | $ 450.00 | Each | 2.2 | |
| 7 | Exhaust Centrifugal Blower (<1000cfm) | $ 250.00 | Each | 2.2 | |
| 8 | Exhaust Centrifugal Blower (>1000 - 2000cfm) | $ 437.00 | Each | 2.2 | |
| 9 | Exhaust Centrifugal Blower (>2000cfm) | $ 500.00 | Each | 2.2 | |
| 10 | Exhaust Riser (Includes Cleaning Grills) | $ 200.00 | Per Floor | | |
| 11 | Exhaust Branch Riser - horizontal runs(<6 feet) | $ - | | | |
| 12 | Exhaust Branch Riser - horizontal runs(>6 feet) | $ 135.00 | Per 10 lin ft. increments | | |
| 13 | Air handling unit (<1000cfm) | $ 404.00 | Each | 2.1 | |
| 14 | Air handling unit (1000 - 2000cfm) | $ 547.50 | Each | 2.1 | |
| 15 | Air handling unit (>2000 - 3000cfm) | $ 697.50 | Each | 2.1 | |
| 16 | Package AC (< 5 Tons) | $ 750.00 | Each | 2.1 | |
| 17 | Package AC - each addditional 2.5 Tons | $ 375.00 | Each | 2.1 | |
| 18 | Mech. Make-up Air (< 1000 cfm) | $ 525.00 | | 2.3 | |
| 19 | Mech. Make-up Air (> 1000 cfm) | $ 825.00 | | 2.3 | |
| 20 | Horizontal Supply/Return Duct < 5sf cross section | $ 185.00 | Per 10 lin ft increments | 2.1 | |
| 21 | Horizontal Supply/Return Duct > 5sf cross section | $ 215.00 | Per 10 lin ft increments | 2.1 | |
| 22 | Supply/Return Riser < 5sf cross section | $ 185.00 | Per Floor | | includes diffusers & registers |
| 23 | Supply/Return Riser > 5sf cross section | $ 235.00 | Per Floor | | includes diffusers & registers |
| 24 | Encapsulation | $ 150.00 | Per 10 lf/sf incriments | | |
| 25 | Access Hatches | $ 35.00 | Per Door | | |
| 26 | Outside Air Duct | $ 105.00 | Per 10 lf incriments | 2.1 | |
| 27 | Outside Air Plenum | $ 8.00 | Per sf -surface area | 2.1 | |
| 28 | Outside Air Intake Grill | $ 8.00 | Per sf | 2.1 | |
| 29 | Package HVAC - Through wall | $ 375.00 | Each | | |
| 30 | Baseboard Heeting Fins | $ 30.00 | Per lf | | |
| 31 | Scaffold Set Up | $ 100.00 | Per 5 ft section | | |

* VENTILATION SYSTEM EVALUATION FORM

2.1 Central Ventilation System Visual Inspection Form

2.2 Mechanical Exhaust System Visual Inspection Form

2.3Mechanical Make-up Air system Visual Inspection Form

NYC 9/11 Public Portal Document

# HVAC Consulting Services

# APPENDIX 3

*Invoice #1*

Contract No. CT 826-200300-19825 OCA No. 0000425814

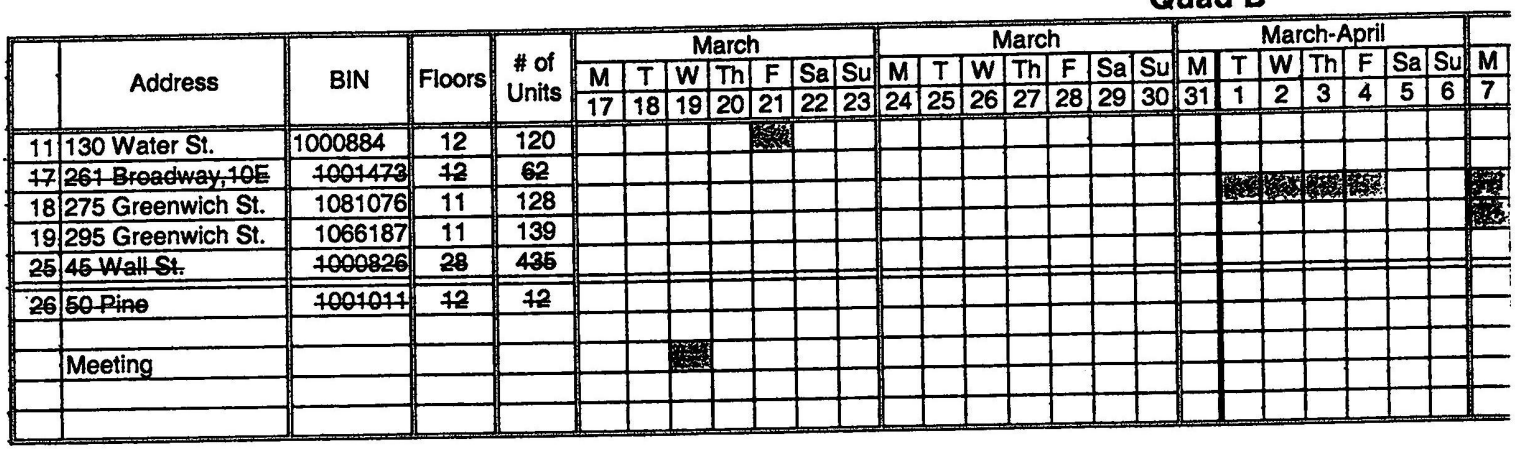


NYC-WTC_000135789

# WTC HVAC Consulting 2003 TAMS EARTH TECH

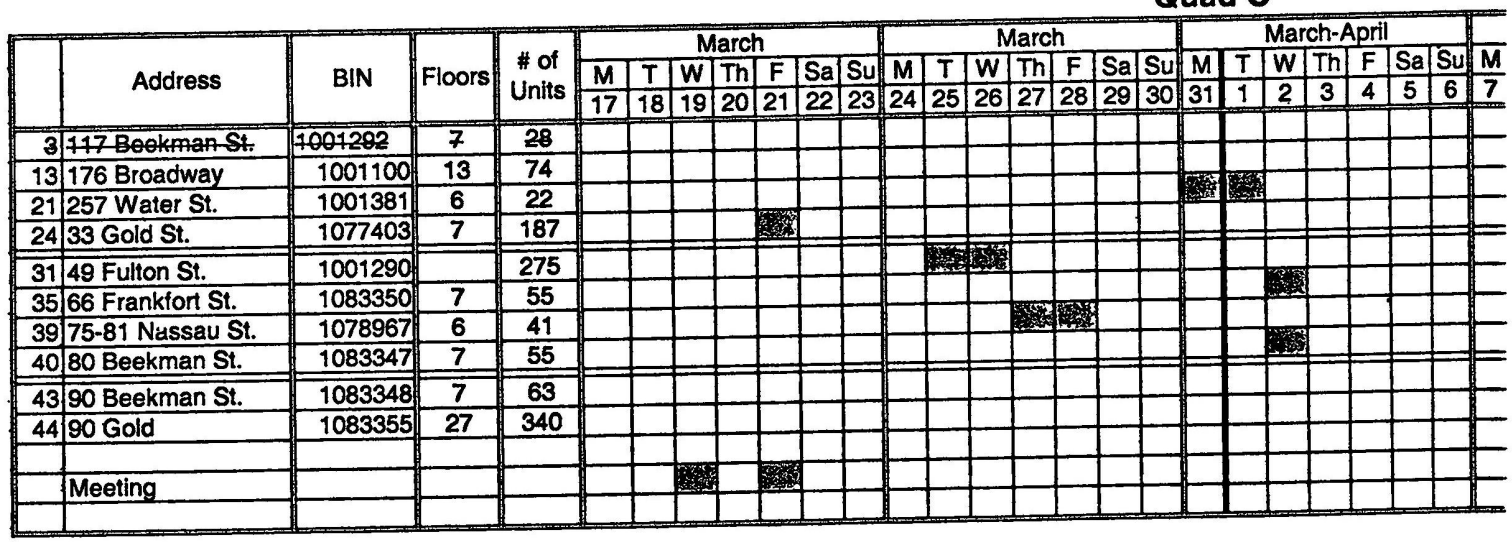
## Quad B

| | Address | BIN | Floors | # of Units |
|---|---|---|---|---|
| 11 | 130 Water St. | 1000884 | 12 | 120 |
| ~~17~~ | ~~261 Broadway,10E~~ | ~~1001473~~ | ~~12~~ | ~~62~~ |
| 18 | 275 Greenwich St. | 1081076 | 11 | 128 |
| 19 | 295 Greenwich St. | 1066187 | 11 | 139 |
| ~~25~~ | ~~45 Wall St.~~ | ~~1000826~~ | ~~28~~ | ~~435~~ |
| ~~26~~ | ~~50 Pine~~ | ~~1001011~~ | ~~12~~ | ~~12~~ |
| | Meeting | | | |



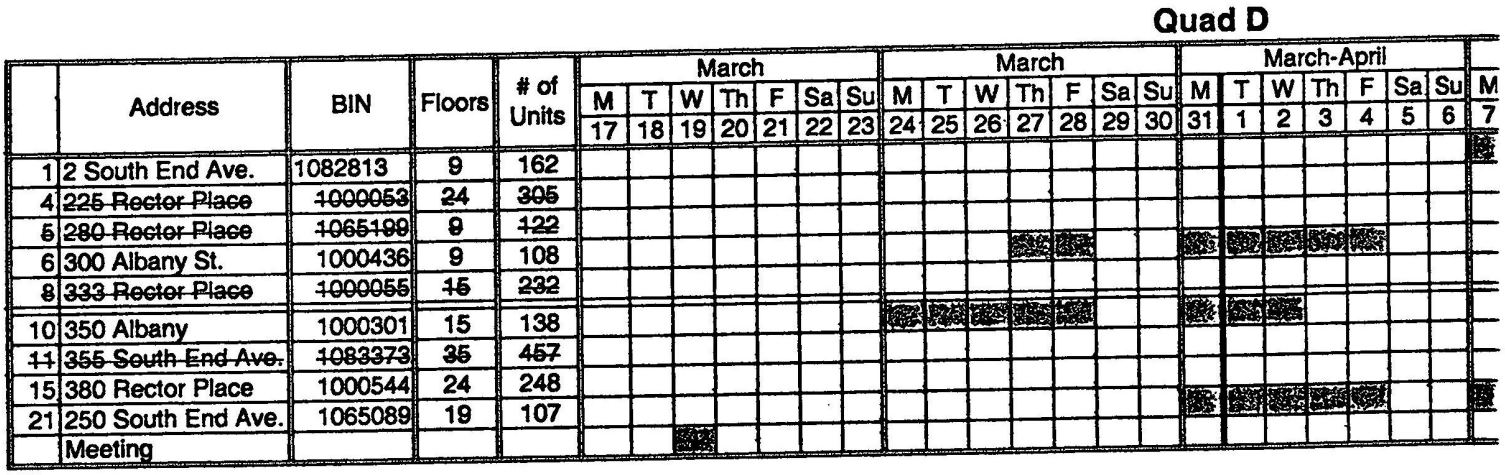

## Quad C

| | Address | BIN | Floors | # of Units |
|---|---|---|---|---|
| ~~3~~ | ~~117 Beekman St.~~ | ~~1001292~~ | ~~7~~ | ~~28~~ |
| 13 | 176 Broadway | 1001100 | 13 | 74 |
| 21 | 257 Water St. | 1001381 | 6 | 22 |
| 24 | 33 Gold St. | 1077403 | 7 | 187 |
| 31 | 49 Fulton St. | 1001290 | | 275 |
| 35 | 66 Frankfort St. | 1083350 | 7 | 55 |
| 39 | 75-81 Nassau St. | 1078967 | 6 | 41 |
| 40 | 80 Beekman St. | 1083347 | 7 | 55 |
| 43 | 90 Beekman St. | 1083348 | 7 | 63 |
| 44 | 90 Gold | 1083355 | 27 | 340 |
| | Meeting | | | |




## Quad D

| | Address | BIN | Floors | # of Units |
|---|---|---|---|---|
| 1 | 2 South End Ave. | 1082813 | 9 | 162 |
| 4 | ~~225 Rector Place~~ | ~~1000053~~ | ~~24~~ | ~~305~~ |
| ~~5~~ | ~~280 Rector Place~~ | ~~1065199~~ | ~~9~~ | ~~122~~ |
| 6 | 300 Albany St. | 1000436 | 9 | 108 |
| ~~8~~ | ~~333 Rector Place~~ | ~~1000055~~ | ~~15~~ | ~~232~~ |
| 10 | 350 Albany | 1000301 | 15 | 138 |
| ~~11~~ | ~~355 South End Ave.~~ | ~~1083373~~ | ~~35~~ | ~~457~~ |
| 15 | 380 Rector Place | 1000544 | 24 | 248 |
| 21 | 250 South End Ave. | 1065089 | 19 | 107 |
| | Meeting | | | |



NYC 9/11 Public Portal Document

HVAC Consulting Services

# APPENDIX 4

*Invoice #1*

Contract No. CT 826-200300-19825 OCA No. 0000425814



NYC-WTC_000135791

NYC 9/11 Public Portal Document

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 130 Water 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 Mechanical Exhaust System # 10 on the roof is impacted and should be cleaned.**

All other systems were not impacted. Please note that there are **there are eighteen (18) Mechanical Exhaust System units on the roof. This constitute four (4) inspections.** Thus we have a total of **four (4) 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



NYC-WTC_000135792

# 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 DUSTERS | (HVAC professional) |
| Building address: | Type of Facility (check all that apply): |
| 130 WATER ST | ✓ Residential |
| NEW YORK, N.Y. | Multi-use |
| | Other (describe) |
| Date of construction: | |
| Number of residential units: | Number of floors: 12 |
| 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<br>Est. no. of units | Mechanical exhaust system<br>Est. no. of units 18 |
| Mechanical make-up air system<br>Est. no. of units | Passive shaft/duct<br>Est. no. of units |
| 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.**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #1

Location: Roof

Area Served: DRYER EXHAUST

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est. total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| [illegible] Est. total qty ____ No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty ____ No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty ____ No. locations inspected | | | 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #2

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts Est. total ln ft 120 No. locations inspected 1 | | | |
| Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #3

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est. total ln ft 120 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible turning vanes Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #4

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est. total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| 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

## 2.2. Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #5

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations<br>Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **Other (specify):** | | | |

**Other Information:**

NOT WORKING

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

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #6

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NO |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NO |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #7

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | T |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #8

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2:2· Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #9

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #10

Location: Roof

Area Served:

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 1 Est total ln ft 120 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 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #11

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | T |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #12

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #13

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

NOT WORKING

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

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #14

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected ____ Est total ln ft 120 No. locations ____ Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty ____ No. locations inspected ____ | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #15

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #1b

Location: Pump Room - Roof | Area Served: Hallways

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 150 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 12 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 12 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #17

Location: 10th Fl. Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 100 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 10 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 10 No. locations inspected 0 | | | I |
| **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**

2.2 **Mechanical Exhaust System Visual Inspection Form**



Mechanical Exhaust System Identification: #18 AIR INTAKE

Location: BOILER RM

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 20 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 | N | |
| **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**

NYC 9/11 Public Portal Document

# HVAC Consulting Services

# APPENDIX 5

*Invoice #1*

Contract No. CT 826-200300-19825 OCA No. 0000425814



NYC-WTC_000135812

NYC 9/11 Public Portal Document

**ENVIRONMENTAL TECHNOLOGIES**
a Division, COLE CONSULTING CORPORATION

Elmsford Executive Park, Building 5
2269 Saw Mill River Road ■ Elmsford, New York 10523
TELEPHONE 914 • 345 • 8000 ■ FACSIMILE 914 • 345 • 0045

February 13th, 2003

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

Re: **WTC HVAC Report for 275 Greenwich Street.**

**Inspection date : February 5th, 2003**

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 the following equipments should be cleaned because WTC dust was found in them.

**Please note that during the visual inspection of the HVAC Units in the above building, the following under listed units were found to be impacted and should be cleaned.**

1. HVAC Unit : Hallway HVAC South. Area Served is South Hallway
2. Basement HVAC, locate in Storage room A, and serve basement area.
3: Roof Mechanical Exhaust System : #6, #8, #11, #12, #25, #26, #27, #28,#30, #31 and #32

All other systems were not impacted. Please note that there are Eight (8) **Central Ventilation System Units** in this building. **This constitute eight (8) inspections. Also there are Thirty four (34) Mechanical Exhaust System units on the roof. This constitute seven (7) inspections.** Thus we have a total of **fifteen (15) 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



NYC-WTC_000135813

# 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: 2/5/03 | Building contact name and phone: |
| Evaluation team (list name and affiliation): | |
| | (Environmental professional) |
| TONY GALLO - DUCT DUSTERS | (HVAC professional) |
| Building address: | Type of Facility (check all that apply): |
| 275 GREENWICH ST | ✓Residential |
| NEW YORK NY. | Multi-use |
| | Other (describe) |
| Date of construction: | |
| Number of residential units: | Number of floors: 11 |
| 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<br>Est. no. of units 8 | Mechanical exhaust system<br>Est. no. of units 34 |
| Mechanical make-up air system<br>Est. no. of units | Passive shaft/duct<br>Est. no. of units |
| 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** 2/5/03

**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.**

# Central Ventilation System Visual Inspection Form



Ventilation System Identification: LAUNDRY RM HVAC

Location: LAUNDRY RM.

Area Served: LAUNDRY RM

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| Outside air intake: Location: Accessible for inspection? Y ✓ N ____ (explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Air handling unit: | | | |
| outside air mixing chamber | Y | N | |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | Y | N | |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| Supply air distribution: | | | |
| Supply air ducts Est. total ln ft 10 No. locations inspected 1 Specify type (circle) metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 2 No. locations inspected 2 | Y | N | |
| Return air distribution: | | | |
| Return air ducts Est. total ln ft 2 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 | | | NP |
| 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): HEAVY

Abraded/delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND.

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

System Visual Inspection Form



Ventilation System Identification: ELEVATOR RM A/C

Location: Roof

Area Served: ELEVATOR RM

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| **Outside air intake:** Location: Accessible for inspection? Y ✓ N_____(explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Air handling unit:** | | | |
| outside air mixing chamber | Y | N | |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| **Supply air distribution:** Supply air ducts Est. total ln ft 20 No. locations inspected 2 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 2 No. locations inspected 2 | Y | N | |
| **Return air distribution:** Return air ducts Est. total ln ft 2 No. locations inspected_____ 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 | | | NP |
| 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): HEAVY

Abraded/delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND.

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

# Central Ventilation System Visual Inspection Form



Ventilation System Identification: LOBBY HEATING

Location: LOBBY ENTRANCE

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| Outside air intake: Location: | | | |
| Accessible for inspection? Y____ N____ (explain): | | | NP |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| Air handling unit: | | | |
| outside air mixing chamber | | | NP |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | Y | N | |
| cooling coils | | | NP |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| Supply air distribution: | | | |
| Supply air ducts Est. total ln ft 2 No. locations inspected 1 Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 1 No. locations inspected 1 | Y | N | |
| Return air distribution: | | | |
| Return air ducts Est. total ln ft 2 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____ No. locations inspected | | | NP |
| Return air plenum damper Est. total qty____ No. locations inspected | | | NP |
| 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): LIGHT

Abraded/delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND.

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

# Ventilation System Visual Inspection Form



Ventilation System Identification: SOUTH HALLWAY HVAC SYSTEM

Location: PACKAGE RM - LOBBY

Area Served: SOUTH HALLWAYS

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? | Component not present not found inaccessible |
|---|---|---|---|
| Outside air intake: Location: Accessible for inspection? Y ✓ N ____ (explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Air handling unit: | | | |
| outside air mixing chamber | Y | N | |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | Y | N | |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| 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 | N | |
| Accessible in-line fire dampers Est. total qty ____ No. locations inspected ____ | | | NP |
| Accessible turning vanes Est. total qty 1 No. locations inspected 1 | Y | N | |
| In-line reheat/cooling coils Est. total qty ____ No. locations inspected ____ | | | NP |
| Supply air diffusers Est. total qty 4 No. locations inspected 2 | Y | N | |
| Return air distribution: Return air ducts Est. total ln ft 4 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 FA plenum areas 1 No. locations inspected 1 | Y | N | |
| Return air plenum damper Est. total qty ____ No. locations inspected | | | NP |
| 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 | No. locations inspected | 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): HEAVY

Abraded/delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND.

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

# Central Ventilation System Visual Inspection Form



Ventilation System Identification: LOBBY ~~HVAC~~ - SOUTH

Location: LOBBY CEILING ABOVE MAILBOXES

Area Served: LOBBY SOUTH SIDE.

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? | Component not present not found inaccessible |
|---|---|---|---|
| Outside air intake: Location: | | | |
| Accessible for inspection? Y____ N____ (explain): | | | NP |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| Air handling unit: | | | |
| outside air mixing chamber | | | NP |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| Supply air distribution: | | | |
| Supply air ducts Est. total ln ft 50 No. locations inspected 2 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 5 No. locations inspected 3 | Y | N | |
| Return air distribution: | | | |
| Return air ducts Est. total ln ft 4 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 | | | NP |
| 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): MODERATE

Abraded delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND.

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

## 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: LOBBY NORTH AC

Location: LOBBY NORTH CEILING

Area Served: LOBBY NORTH

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? | Component not present not found inaccessible |
|---|---|---|---|
| Outside air intake: Location: | | | |
| Accessible for inspection? Y____ N____ (explain): | | | NP |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| Air handling unit: | | | |
| outside air mixing chamber | | | NP |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | Y | N | |
| vibration collars | | | NP |
| Supply air distribution: Supply air ducts Est. total ln ft 75 No. locations inspected 2 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 6 No. locations inspected 2 | Y | N | |
| Return air distribution: Return air ducts Est. total ln ft 6 No. locations inspected 2 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 | | | NP |
| 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): LIGHT

Abraded delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND.

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

System Visual Inspection Form



Ventilation System Identification: HALLWAY HVAC SOUTH

Location: SERVICE ENTRANCE CEILING

Area Served: SOUTH HALLWAYS

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? | Component not present not found inaccessible |
|---|---|---|---|
| Outside air intake: Location: Accessible for inspection? Y ✓ N_____(explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Air handling unit: | | | |
| outside air mixing chamber | Y | N | |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl-blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | Y | N | |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| Supply air distribution: Supply air ducts Est. total ln ft 200 No. locations inspected 3 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty 2 No. locations inspected 1 | Y | N | |
| In-line reheat cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 10 No. locations inspected 3 | Y | N | |
| Return air distribution: Return air ducts Est. total ln ft 15 No. locations inspected 2 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | Y | |
| Return air plenum Est. total RA plenum areas 1 No. locations inspected 1 | Y | Y | |
| Return air plenum damper Est. total qty_____ No. locations inspected | | | NP |
| 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): LIGHT

Abraded delaminated acoustical lining

Filter bypass (describe)

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

FOUND WTC DUST IN SYSTEM. CLEANING IS RECOMMENDED.

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

# 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: HV FOR BASEMENT

Location: STORAGE RM A

Area Served: BASEMENT AREAS

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| Outside air intake: Location: | | | |
| Accessible for inspection? Y ✓ N ____ (explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Air handling unit: | | | |
| outside air mixing chamber | Y | N | |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | Y | N | |
| cooling coils | | | NP |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| 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 | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 8 No. locations inspected 3 | | | |
| Return air distribution: Return air ducts Est. total ln ft 10 No. locations inspected 2 Specify type (circle) metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | Y | |
| Return air plenum Est. total RA plenum areas 1 No. locations inspected 1 | Y | Y | |
| Return air plenum damper Est. total qty ____ No. locations inspected | | | NP |
| 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 ( No. locations inspected ( | 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): LIGHT

Abraded delaminated acoustical lining

Filter bypass (describe)

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #1

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #2

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #3

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information.

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #4

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| **Other (specify):** | | | |

**Other Information:**

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #5

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 16 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

# Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #6

Location: Roof

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NO |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 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 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #7

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #8

Location: ROOF

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 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 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #9

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible tumbl[illegible] Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| **Other (specify):** | | | |

**Other Information:**

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #10



Location: ROOF

Area Served:

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? | Componen ξ not present ξ not found ξ inaccessibl |
|---|---|---|---|
| Exhaust air outlet: Location: | | | |
| Accessible for inspection? Y ✓ N ____ (explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #11

Location: Roof

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 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 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #12

Location: Roof

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | ND |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 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 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 10 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #13

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

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## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #14

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | NP |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | — |
| Accessible turning vanes Est. [illegible] No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #15

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, other: | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #16

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #17

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #18

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #19

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| **Other (specify):** | | | |

**Other Information:**

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

NO WTC DUST FOUND.

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

## 2.2 : Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #20

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

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# Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #21

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

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## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #22

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | T |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | T |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

# 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #23

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #24

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | ND |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | ND |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO. WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #25

Location: ROOF

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | Y | Y | |
| Exhaust air distribution: | | | NO |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations<br>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 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty ____ No. locations inspected | | | NO |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #26

Location: Roof

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 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 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #27

Location: - Roof

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 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 11 No. locations inspected U | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected U | | | |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #28

Location: 10th FL. ROOF.

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 100 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 10 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 10 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #29

Location: 10TH FL. ROOF

Area Served:

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 no: present ξ no: found ξ inaccessib |
|---|---|---|---|
| Exhaust air outlet: Location: Accessible for inspection? Y ✓ N ____ (explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | NP |
| Exhaust air ducts inspected ( ) Est total ln ft 100 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 10 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 10 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

2.2 **Mechanical Exhaust System Visual Inspection Form**



Mechanical Exhaust System Identification: #30

Location: 10TH FL ROOF

Area Served:

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? | Componen ξ not present ξ not found ξ inaccessibl |
|---|---|---|---|
| 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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 100 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 10 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 10 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

...l 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #31

Location: 10TH FL. ROOF | Area Served:

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: | | | |
| Accessible for inspection? Y____ N____ (explain): | Y | Y | |
| louvers, grates and/or screens | Y | Y | |
| outside air duct | Y | Y | |
| outside air damper(s) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | Y | Y | |
| Exhaust air distribution: | | | NP |
| Exhaust air ducts inspected 1 Est total ln ft 100 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 10 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | ND |
| Exhaust air grilles Est. total qty 10 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Page 1

Mechanical Exhaust System Identification: #32

Location: 10TH Fl - Roof

Area Served:

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? | Compone: ⁝ no: present ⁝ not found ⁝ inaccessib |
|---|---|---|---|
| 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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 100 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 10 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 10 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

General Assessment (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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #33

Location: 7TH-FL. Roof

Area Served:

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: Accessible for inspection? Y ✓ N ____ (explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing-acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 70 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est total qty 7 No. locations inspected 0 | | | I |
| Accessible fire/smoke dampers Est total qty ____ No. locations inspected ____ | | | NP |
| Exhaust air grilles Est. total qty 7 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

# Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #34

Location: 7TH FL. -- ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical-lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 70 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 7 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 7 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

NYC 9/11 Public Portal Document

HVAC Consulting Services

# APPENDIX 6

*Invoice #1*

Contract No. CT 826-200300-19825 OCA No. 0000425814



NYC-WTC_000135865

NYC 9/11 Public Portal Document

**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 13th, 2003

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

Re: **WTC HVAC Report for 295 Greenwich Street.**

**Inspection date : February 5th, 2003**

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 Maintenance Shop and the Mechanical Exhaust System #28 on the Roof were impacted and should be cleaned.**

All other systems were not impacted. Please note that there are **Four (4) Central Ventilation System Units in this building. This constitutes four (4) inspections. Also there are Twenty nine (29) Mechanical Exhaust System units on the roof. This constitute six (6) inspections.** 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



NYC-WTC_000135866

# 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: 2/5/03 | Building contact name and phone: |
| Evaluation team (list name and affiliation): | |
| | (Environmental professional) |
| TONY GALLO - DUCT DUSTERS | (HVAC professional) |
| Building address: | Type of Facility (check all that apply): |
| 295 GREENWICH ST | ✓Residential |
| NEW YORK | Multi-use |
| | Other (describe) |
| Date of construction: | |
| Number of residential units: | Number of floors: 11 |
| 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<br>Est. no. of units 4 | Mechanical exhaust system<br>Est. no. of units 29 |
| Mechanical make-up air system<br>Est. no. of units | Passive shaft/duct<br>Est. no. of units |
| 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** 2/5/03

**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 AK

Location: LOBBY CEILING ABOVE MAILBOXES

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| **Outside air intake:** Location: | | | |
| Accessible for inspection? Y____ N____ (explain): | | | NP |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| **Air handling unit:** | | | |
| outside air mixing chamber | | | NP |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| **Supply air distribution:** | | | |
| Supply air ducts Est. total ln ft 120 No. locations inspected 1 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 6 No. locations inspected 2 | Y | N | |
| **Return air distribution:** | | | |
| Return air ducts Est. total ln ft 6 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 | | | NP |
| 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): LIGHT

Abraded delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND

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

## 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: LOBBY HV

Location: LOBBY ENTRANCE

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| **Outside air intake:** Location: | | | |
| Accessible for inspection? Y____ N____ (explain): | | | NP |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| **Air handling unit:** | | | |
| outside air mixing chamber | | | NP |
| 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 | N | |
| pre-heat coils | Y | N | |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | | | NP |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | Y | N | |
| vibration collars | | | NP |
| **Supply air distribution:** | | | NP |
| Supply air ducts Est. total ln ft 2 No. locations inspected 1 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 1 No. locations inspected 1 | Y | N | |
| **Return air distribution:** | | | |
| Return air ducts Est. total ln ft 1 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____ No. locations inspected | | | NP |
| Return air plenum damper Est. total qty____ No. locations inspected | | | NP |
| 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): LIGHT

Abraded delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND.

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

## 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: BASEMENT HV

Location: MAINTENANCE SHOP

Area Served: BASEMENT AREAS

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| Outside air intake: Location: | | | |
| Accessible for inspection? Y____ N____ (explain): | | | NP |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| Air handling unit: | | | |
| outside air mixing chamber | | | NP |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | Y | N | |
| cooling coils | | | NP |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| Supply air distribution: | | | |
| Supply air ducts Est. total ln ft 200 No. locations inspected 1 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 12 No. locations inspected 4 | Y | N | |
| Return air distribution: | | | |
| Return air ducts Est. total ln ft 8 No. locations inspected 2 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | Y | |
| Return air plenum Est. total RA plenum areas 1 No. locations inspected 1 | Y | Y | |
| Return air plenum damper Est. total qty____ No. locations inspected | | | NP |
| Accessible in-line fire dampers Est. total qty____ No. locations inspected | | | NP |

| | | | |
|---|---|---|---|
| Accessible turning vanes Est. total qty_____ No. locations inspected | | | ND |
| 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): LIGHT

Abraded delaminated acoustical lining

Filter bypass (describe)

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

## 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: LAUNDRY RM HVAC

Location: LAUNDRY ROOM

Area Served: LAUNDRY RM

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| Outside air intake: Location: | | | |
| Accessible for inspection? Y____ N____ (explain): | | | |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| Air handling unit: | | | NP |
| outside air mixing chamber | | | |
| filter rack(s) | | | NP |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | Y | N | |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | Y | N | |
| condensate drain pan | | | NP |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | Y | N | |
| vibration collars | | | NP |
| Supply air distribution: | | | NP |
| Supply air ducts Est. total ln ft 15 No. locations inspected 2 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat [illegible] Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 2 No. locations inspected 2 | Y | N | |
| Return air distribution: | | | |
| Return air ducts Est. total ln ft 4 No. locations inspected 2 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 | | | NP |
| 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): LIGHT

Abraded delaminated acoustical lining

Filter bypass (describe)

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #1



Location: ROOF

Area Served:

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: | | | |
| Accessible for inspection? Y ✓ N ____ (explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | NP |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations<br>Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #2



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #3



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #4



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | NP |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 4 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #5

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | NP |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #6

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #7

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC Dust Found.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #8



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #9



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | NP |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations<br>Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct ~~wood~~ | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #10



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | | | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | Y | N | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | | | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): (metal) (fibrous glass lined metal) masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 4 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #11

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #12

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #13



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | N | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #14



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts Est total ln ft 120 No. locations inspected 1 Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #15



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total in ft 120 No. locations | | | |
| Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #16

Location: ROOF

Area Served:

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: Accessible for inspection? Y ✓ N_____(explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #17

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #18



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #19



Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO. WTC DUST FOUND

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #20



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #21



Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | NP |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #22



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | Y | N | |
| Exhaust air distribution: | | | NP |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations<br>Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: #23



Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NO |
| Exhaust air distribution: | | | |
| Exhaust air ducts inspected 1 Est total ln ft 120 No. locations | | | |
| Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | T |
| Accessible turning vanes Est total qty No. locations inspected | | | NO |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #24

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct ~~wood~~ | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #25

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| **Other (specify):** | | | |

**Other Information:**

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

No WTC Dust Found.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #26

Location: ROOF | Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| **Other (specify):** | | | |

**Other Information:**

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #27

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | ND |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal, fibrous glass lined metal, masonry, fibrous glass board, flex-duct, wood | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | ND |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| **Other (specify):** | | | |

**Other Information:**

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

NO WTC DUST FOUND.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #28

Location: Roof | Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 120 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 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #29

Location: Roof | Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est total ln ft 120 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct ~~wood~~ | Y | N | |
| Accessible in-line fire dampers Est. total qty 11 No. locations inspected 0 | | | I |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| Exhaust air grilles Est. total qty 11 No. locations inspected 0 | | | I |
| **Other (specify):** | | | |

**Other Information:**

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

NO WTC DUST FOUND.

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

NYC 9/11 Public Portal Document

# HVAC Consulting Services

# APPENDIX 7

*Invoice #1*

Contract No. CT 826-200300-19825 OCA No. 0000425814



NYC-WTC_000135905

DUCT DUSTERS AIR DUCT CLEANING HVAC

120 Kimball Terrace
Yonkers, New York 10704

TEL: 914-776-5700
FAX: 914-237-4390

***Inspection Report for Warren & Panzer Group***
**Inspection Address: 257 Water Street., NYC**
**Inspection Date: 11/15/02**

**Exhaust Fans**

| Fan # | Model | Manufacturer | Condition | Comments |
|---|---|---|---|---|
| 1 | 3C401A | Dayton | Grey | Upper Rooftop Unit - Possible WTC Debris |
| 2 | 3C401A | Dayton | Grey | Upper Rooftop Unit - Possible WTC Debris |
| 3 | 3C401A | Dayton | White | Upper Rooftop Unit - Possible WTC Debris |
| 4 | 3C401A | Dayton | Grey | Rooftop Unit - Possible WTC Debris |
| 5 | 3C424 | Dayton | Clean | Rooftop Unit |
| 6 | 3C424 | Dayton | White | Rooftop Unit - Possible WTC Debris |
| 7 | 3C424 | Dayton | Black | Rooftop Unit |
| 8 | 3C401A | Dayton | Black | Rooftop Unit |
| 9 | 3C401A | Dayton | Black | Rooftop Unit |
| 10 | 3C401A | Dayton | Grey | Rooftop Unit - Possible WTC Debris |
| 11 | 3C401A | Dayton | White | Rooftop Unit - Possible WTC Debris |
| 12 | 3C401A | Dayton | Grey | Rooftop Unit - Possible WTC Debris |

**HVAC**

| Fan # | Model | Manufacturer | Condition | Comments |
|---|---|---|---|---|
| | No Information Available | Evapco | Black | Upper Rooftop |

# VENTILATION SYSTEM EVALUATION FORM

## Part 1.0 General Information

| | |
|---|---|
| Date of Evaluation: 11/15 | Building contact name and phone: |
| Evaluation Team (list name and affiliation): | |
| FRANK MORITI - DUCT DUSTERS | (Environmental Professional) |
| TONY GALLO - DUCT DUSTERS | (HVAC/Electrical Professional) |
| | (Sheet Metal Professional) |
| Building Address: | Type of Facility (check all that apply): |
| 257 WATER ST | ☒ Residential |
| NEW YORK | ☐ Multi-use |
| | ☐ Other (describe) |
| | Number of residential units: Number of floors: |
| HVAC System Types (check all that apply) | |
| ☐ Unit ventilator (single residence unit) | ☐ Wall/window AC unit (single residence unit) |
| ☐ Fan coil unit (single residence unit) | ☒ Central ventilation system |
| ☐ Heat pump unit (single residence unit) | ☒ Passive shaft/duct |
| ☐ Other (describe) | |
| Location of outside air intake: | |
| Outside air intake accessible for inspection _____Y _____N (explain) | |

## Part 2.0 Checklists

### 2.1 Ventilators, wall air conditioning units and window air conditioning units in common spaces

Ventilation System Identification: KITCHEN - BATHROOM EXHAUST - SEE ATTACHED

Location: ROOF

Access adequate for inspection of components: YES

| System Components | System Component Substrate Material (sheet metal wrapped) (sheet metal lined) (fiberglass) (flexible connector) (double walled) | Dust/Dirt / Debris: None | Light (<1/16 inch depth) | Heavy (≥ 1/16 inch depth | Suspect WTC-Related Dust: Present? (Y/N) | Estimate % of total dust loading |
|---|---|---|---|---|---|---|
| Outside air intake louvers, grates and/or screens | | | | | | |
| Outside air duct | | | | | | |
| Outside air damper(s) | | | | | | |
| Return air grille | | | | | | |
| Return air plenum | | | | | | |
| Filter rack | | | | | | |
| Filter media | | | | | | |
| Coils (evaporator) | | | | | | |
| Blower assembly | | | | | | |
| Condensate drain pan | | | | | | |
| In-line electrical resistance strip heaters (in supply ducts connected to unit ventilators) | | | | | | |
| Fire dampers | | | | | | |
| Turning vanes | | | | | | |
| Supply air plenum or supply duct | | | | | | |
| Supply air plenum or supply duct liner | | | | | | |
| Supply air diffuser | | | | | | |

### 2.1 Ventilators, wall air conditioning units and window air conditioning units in common spaces (cont.)

# ATTACHMENT A – SCOPE OF WORK

| Other Information: | |
|---|---|
| ☒ Unit cycled prior to inspection | ☐ Color of dust/dirt/debris |
| ☐ Filter loading (general impression) | ☐ Water damage |
| ☐ Filter bypass (describe) | ☐ Visible suspect mold growth |
| ☐ Abraded/delaminated acoustical lining | ☐ Evidence of animal incursion (carcasses, feathers, fecal matter |

General Impression:

## 2.2 Fan coil/ heat pump units in common spaces

Ventilation System Identification:

Location:

Access adequate for inspection of components:

| | | Dust/Dirt/Debris | | | Suspect WTC-Related Dust | |
|---|---|---|---|---|---|---|
| System Components | System Component Substrate Material (sheet metal wrapped) (sheet metal lined) (fiberglass) (flexible connector) (double walled) | None | Light (<1/16 inch depth) | Heavy (≥ 1/16 inch depth | Present? (Y/N) | Estimate % of total dust loading |
| Return air grille | | | | | | |
| Return air plenum | | | | | | |
| Filter rack | | | | | | |
| Filter media | | | | | | |
| Blower assembly | | | | | | |
| Thermal coils | | | | | | |
| Supply air plenum | | | | | | |
| Supply air diffuser | | | | | | |

| Other Information: | |
|---|---|
| ☐ Unit cycled prior to inspection | ☐ Color of Dust/Dirt/Debris |
| ☐ Filter loading (general impression) | ☐ Water damage |
| ☐ Filter bypass (describe) | ☐ Visible suspect mold growth |
| ☐ Abraded/delaminated acoustical lining | ☐ Evidence of animal incursion (carcasses, feathers, fecal matter) |

General Impression:

## 2.3 Central ventilation systems

Ventilation System Identification: HVAC FOR HALLWAYS MODEL - EVAPCO

Location: ROOF | Area Served:

Mechanical room: clean___Y___N dry___Y___N stored chemicals/refuse___Y___N

Access adequate for inspection of components: YES

AHU interior surfaces are visibly accessible: YES

2.3 Central ventilation systems (co

ATTACHMENT A – SCOPE OF WORK

| | | Dust/Dirt/Debris | | | Suspect WTC-Related Dust | |
|---|---|---|---|---|---|---|
| System Components | System Component Substrate Material | None | Light (<1/16 inch depth) | Heavy (≥ 1/16 inch depth | Present? (Y/N) | Estimate % of total dust loading |
| Outside air intake louvers, grates and/or screens | | | X | | | |
| Outside air duct | | | X | | | |
| Outside air damper(s) | | | X | | | |
| Return air grilles | | | X | | | |
| Return air plenum | | | X | | | |
| Return air plenum damper | | | | | | |
| Return air ducts | | | X | | | |
| Turning vanes | | | | | | |
| Mixing chambers | | | | | | |
| Filter rack(s) | | X | / | | | |
| Filter banks/media | | | | | | |
| Pre-heat coils | | | X | | | |
| Cooling coils | | | X | | | |
| Re-heat coils | | | | | | |
| Humidification and/or air cleaning equipment | | | | | | |
| Fire dampers | | | | | | |
| In-line re-heat coils | | | | | | |
| Acoustical blower housing lining | | | X | | | |
| Duct connectors | | | | | | |
| Blower assembly including blower wheel, blower housing, air vanes, in-line noise attenuators, acoustical treatments (e.g. baffles, duct linings) | | | X | | | |
| Condensate drain pan | | | | | | |
| Condensate accumulator | | | | | | |
| Supply air plenum | | | X | | | |
| Supply air plenum damper(s) | | | | | | |
| Supply air ducts | | | X | | | |
| -High pressure - main trunk<br>-Low pressure – branches | | | | | | |
| Supply plenum or supply duct linings | | | X | | | |
| Supply air duct damper(s) | | | | | | |
| Supply air diffusers | | | | | | |
| Terminal-boxes | | | | | | |
| Open or ducted passive ventilation shaft(s) | | | | | | |

Other Information:

| | |
|---|---|
| ☒ Unit cycled prior to inspection | ☐ Color of Dust/Dirt/Debris |
| ☒ Filter loading (general impression) NORMAL | ☐ Water damage |
| ☐ Filter bypass (describe) | ☐ Visible suspect mold growth |
| ☐ Abraded/delaminated acoustical lining | ☐ Evidence of animal incursion (carcasses, feathers, fecal matter) |

# ATTACHMENT A – SCOPE OF WORK

## 2.4 Sampling

Sampling is required if light to heavy dust is present that is not visually identified as WTC related (maximum 5 samples).

| |
|---|
| Samples Collected: ____Y____N |
| Sample Locations: |
| Location 1: |
| Location 2: |
| Location 3: |
| Location 4: |
| Location 5: |

NYC 9/11 Public Portal Document

HVAC Consulting Services

# APPENDIX 8

*Invoice #1*

Contract No. CT 826-200300-19825 OCA No. 0000425814



NYC-WTC_000135911

# 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: 1/22/03 | Building contact name and phone: |
| Evaluation team (list name and affiliation): | |
| TONY GALLO - DUCT DUSTERS | (Environmental professional) |
| | (HVAC professional) |
| Building address: | Type of Facility (check all that apply): |
| 49 FULTON ST. | X Residential |
| NEW YORK, NY. | Multi-use |
| | Other (describe) |
| Date of construction: | |
| Number of residential units: 300 | Number of floors: 20 |
| Prior inspection report/maintenance records available for review?: NO | |
| Other comments | |

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

| | |
|---|---|
| Central ventilation system<br>Est. no. of units 9 | Mechanical exhaust system<br>Est. no. of units 29 |
| Mechanical make-up air system<br>Est. no. of units | Passive shaft/duct<br>Est. no. of units 2 |
| 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** 1/22/03

**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: ~~AHU~~ AH-1 ELEVATOR RM A/C

Location:

Area Served: ELEVATOR RM

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| **Outside air intake:** Location: Accessible for inspection? Y____ N____ (explain): | | | NP |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| **Air handling unit:** | | | |
| outside air mixing chamber | | | NP |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| **Supply air distribution:** Supply air ducts Est. total ln ft 4 No. locations inspected 1 Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 1 No. locations inspected 1 | Y | N | |
| **Return air distribution:** Return air ducts Est. total ln ft 4 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 | | | NP |
| 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): LIGHT

Abraded/delaminated acoustical lining

Filter bypass (describe)

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

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

## 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: AH-2 A/C

Location:

Area Served: ELEVATOR RM

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| **Outside air intake:** Location: Accessible for inspection? Y____ N____ (explain): | | | NP |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| **Air handling unit:** | | | |
| outside air mixing chamber | | | NP |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| **Supply air distribution:** Supply air ducts Est. total ln ft 4 No. locations inspected 1 Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 1 No. locations inspected 1 | Y | N | |
| **Return air distribution:** Return air ducts Est. total ln ft 4 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 | | | NP |
| 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): LIGHT

Abraded/delaminated acoustical lining

Filter bypass (describe)

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

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

## 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: TRANE A/C #1

Location: LOWER ROOF | Area Served: MEDICAL

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| **Outside air intake:** Location: Accessible for inspection? Y ✓ N_____(explain): | | | |
| louvers, grates and/or screens | | | NP |
| outside air duct | | | NP |
| outside air damper(s) | | | NP |
| **Air handling unit:** | | | |
| outside air mixing chamber | | | NP |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| **Supply air distribution:** Supply air ducts Est. total ln ft 50 No. locations inspected 2 Specify type (circle): (metal) (fibrous glass lined metal) masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 4 No. locations inspected 0 | | | I |
| **Return air distribution:** Return air ducts Est. total ln ft 10 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 | | | NP |
| 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): LIGHT

Abraded/delaminated acoustical lining

Filter bypass (describe)

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

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

## 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: AC #2

Location: LOWER ROOF | Area Served: CAFETERIA

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| **Outside air intake:** Location: Accessible for inspection? Y ✓ N_____(explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Air handling unit:** | | | |
| outside air mixing chamber | Y | N | |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| **Supply air distribution:** Supply air ducts Est. total ln ft 75 No. locations inspected 2 Specify type (circle): (metal) (fibrous glass lined metal) masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 4 No. locations inspected 0 | | | I |
| **Return air distribution:** Return air ducts Est. total ln ft 6 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 | | | NP |
| 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 ( No. locations inspected ( | | | I |

## 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): LIGHT

Abraded/delaminated acoustical lining

Filter bypass (describe)

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

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

## 2.1 Central Ventilation System Visual Inspection Form



Ventilation System Identification: AC #3

Location: LOWER ROOF | Area Served: CAFETERIA

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? | Component ξ not present ξ not found ξ inaccessible |
|---|---|---|---|
| **Outside air intake:** Location: Accessible for inspection? Y ✓ N_____(explain): | Y | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Air handling unit:** | | | |
| outside air mixing chamber | Y | N | |
| filter rack(s) | Y | N | |
| filter media | Y | N | |
| blower assembly incl. blower wheel, blower housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| pre-heat coils | | | NP |
| heating coils | | | NP |
| cooling coils | Y | N | |
| re-heat coils | | | NP |
| condensate drain pan | Y | N | |
| supply air plenum | Y | N | |
| supply air plenum damper(s) | | | NP |
| vibration collars | | | NP |
| **Supply air distribution:** Supply air ducts Est. total ln ft 65 No. locations inspected 1 Specify type (circle): (metal) (fibrous glass lined metal) masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total qty No. locations inspected | | | NP |
| In-line reheat/cooling coils Est. total qty No. locations inspected | | | NP |
| Supply air diffusers Est. total qty 4 No. locations inspected 0 | | | I |
| **Return air distribution:** Return air ducts Est. total ln ft 6 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 | | | NP |
| Accessible in-line fire dampers Est. total qty_____ No. locations inspected | | | NP |

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #3

Location: LOWER ROOF

Area Served:

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): | | | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts Est total ln ft 6 No. locations inspected 1 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 | N | |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #4

Location: Lower Roof | Area Served: KITCHEN

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): | | | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 2 Est total ln ft 25 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 | N | |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: #5

Location: LOWER ROOF | Area Served: KITCHEN

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): | | | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 2 Est total ln ft 20 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 | N | |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE1

Location: ROOF | Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 210 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 No. locations inspected | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE 2

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts Est total ln ft 210 No. locations inspected 1 Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE 3

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts Est total ln ft 210 No. locations inspected 1 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE 4

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est. total ln ft 210 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | NP |
| Accessible turning vanes Est. total | | | NP |
| Exhaust air grilles Est. total qty No. locations inspected | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE 5

Location: Roof

Area Served:

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): | | | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected ( Est total ln ft 210 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE 6

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 210 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE 7

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est. total ln ft 210 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE-8

Location: 14TH FL. TERRACE | Area Served:

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): | | | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est. total ln ft 140 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 13 No. locations inspected 0 | | | I |
| **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**

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: KE 9

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts Est total ln ft 210 No. locations inspected 1 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: E5

Location: 15TH FL TERRACE

Area Served:

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): | | | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est. total ln ft 150 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 14 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: E6

Location: 15TH FL. TERRACE

Area Served:

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): | | | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| **Exhaust fan unit:** | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| **Exhaust air distribution:** Exhaust air ducts inspected 1 Est. total ln ft 150 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 14 No. locations inspected 0 | | | I |
| **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**

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## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 1

Location: ROOF

Area Served:

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 bird screens | Y | Y | |
| outside air duct | Y | Y | |
| outside air damper(s) | Y | Y | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est. total ln ft 210 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 2

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 210 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 3

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts Est total ln ft 210 No. locations inspected 1 ; Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

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## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 5

Location: Roof | Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | ND |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 210 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| Accessible in-line fire dampers Est. total qty No. locations inspected | | | ND |
| Accessible turning vanes Est. total qty No. locations inspected | | | ND |
| Exhaust air grilles Est. total qty 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 6

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 210 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form

Mechanical Exhaust System Identification: TE 8

Location: ROOF

Area Served:

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) | Y | Y | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | Y | |
| blower housing acoustical lining | Y | Y | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est. total ln ft 210 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 90 No. locations inspected 0 | | | I |
| Other (specify): | | | |

Other Information:

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

WTC DUST PRESENT. CLEANING IS RECOMMENDED.

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

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## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 9

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 210 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 10

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected ( Est total ln ft 210 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

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## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 11

Location: ROOF

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 210 No. locations Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

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## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TF 12

Location: Roof

Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts inspected 1 Est total ln ft 210 No. locations Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

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## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: TE 13

Location: Roof | Area Served:

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 | N | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | Y | N | |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | Y | N | |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts Est total ln ft 210 No. locations inspected 1 Specify type (circle): (metal) fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 20 No. locations inspected 0 | | | I |
| 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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: BASEMENT ROOMS - EXHAUST

Location: BASEMENT

Area Served: BASEMENT AREAS EXHAUST

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): | | | |
| 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 3 Est. total ln ft 125 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 4 No. locations inspected 2 | Y | N | |
| **Other (specify):** | | | |

**Other Information:**

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

WTC DUST PRESENT FROM OUTSIDE LOUVER TO 4 FEET PAST EXHAUST FAN. CLEANING IS RECOMMENDED FOR THIS AREA ONLY.

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

## 2.2 Mechanical Exhaust System Visual Inspection Form



Mechanical Exhaust System Identification: ELEVATOR RM EXHAUST

Location: ELEVATOR RM

Area Served: ELEVATOR 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): | | | |
| louvers, grates and/or screens | Y | N | |
| outside air duct | Y | N | |
| outside air damper(s) | | | NP |
| Exhaust fan unit: | | | |
| blower assembly incl. blower wheel, housing, air vanes, in-line noise attenuators | Y | N | |
| blower housing acoustical lining | | | NP |
| vibration collars | | | NP |
| Exhaust air distribution: Exhaust air ducts Est total ln ft 6 No. locations inspected 2 Specify type (circle): metal fibrous glass lined metal masonry fibrous glass board flex-duct wood | Y | N | |
| 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 | N | |
| 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: AIR INTAKE | | | |
| Location: GENERATOR RM. | Area Served: GENERATOR RM. | | |
| **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: GENERATOR RM/ ROOF<br>Accessible for inspection? Y ✓ N_____(explain): | Y | N | |
| louvers, grates, screens or weather cap | Y | N | |
| **Exhaust outlet/louver (if servicing exhaust air):** Location:<br>Accessible for inspection? Y_____N_____(explain): | | | |
| louvers, grates, screens or weather cap | | | |
| **Supply air distribution (if servicing supply air):**<br>Supply air outlet(s) Est. total qty 4 No. locations inspected 1<br>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 | P | | NP |
| **Return air distribution (if servicing exhaust air):**<br>Exhaust air inlet(s) Est. total qty_____ No. locations inspected_____<br>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 | | | |
| **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: AIR INTAKE

Location: ELEVATOR RM

Area Served: ELEVATOR RM

| 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: ELEVATOR RM / ROOF<br>Accessible for inspection? Y ✓ N_____(explain): | Y | N | |
| louvers, grates, screens or weather cap | Y | N | |
| Exhaust outlet/louver (if servicing exhaust air): Location:<br>Accessible for inspection? Y_____N_____(explain): | | | |
| louvers, grates, screens or weather cap | | | |
| Supply air distribution (if servicing supply air):<br>Supply air outlet(s) Est. total qty 1 No. locations inspected 1<br>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 | P | | NP |
| Return air distribution (if servicing exhaust air):<br>Exhaust air inlet(s) Est. total qty_____ No. locations inspected_____<br>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 | | | |
| 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