Multimedia Inspection Checklist for Dry Cleaning Facilities

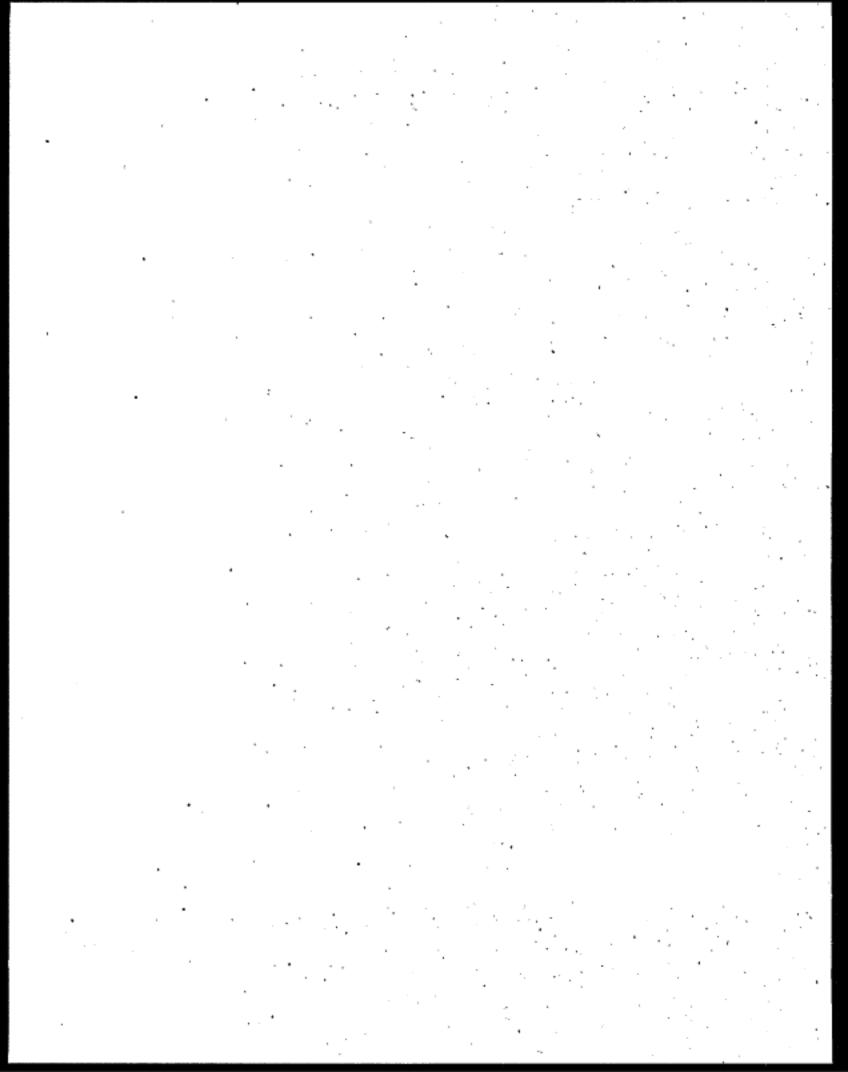
An Excerpt from the USA EPA publication of
Multimedia Inspection Guidance for Dry Cleaning
Facilities
EPA/305-B-96-001

APPENDIX A

MULTIMEDIA INSPECTION CHECKLIST FOR DRY CLEANING FACILITIES

TABLE OF CONTENTS

| I. | GENERAL FACILITY AND MANAGEMENT INFORMATION | A-1 |
|-----|---|-------------------|
| | A. General Facility Information | A-1 A-2 |
| п. | DRY CLEANING PROCESS AREA | A-3 |
| ••• | A. Dry Cleaning General Equipment Information | A-4 A-4 A-5 |
| m. | PERC AND PERC WASTE HANDLING AREAS | A-6 |
| | A. Perc Storage and Dispensing B. Satellite Waste Accumulation Area C. Hazardous Waste Storage Area D. Hazardous Wastes Shipping E. Wastewater Management | A-6 A-7 A-8 |
| IV. | RECORDS AND FILES INSPECTION | A-9 |
| | A. Reporting B. Recordkeeping | A-9 A-10 |
| v. | ADDITIONAL COMMENTS | A-12 |



MULTIMEDIA INSPECTION CHECKLIST FOR DRY CLEANING FACILITIES

| I. , | GENERAL FACILITY AND MANAGEMENT I | NFORMATION |
|----------|---|------------------------|
| Α. | General Facility Information | |
| 1. | Date of Inspection | |
| 2. | Facility Name: | |
| 3. | Facility Telephone Number: | |
| 4 | Facility Address (physical location): | |
| ٠, | | |
| | | |
| | | |
| 5. | Mailing Address (if différent): | |
| | | |
| .,,, | | |
| 6. , | Facility Owner Contact Information (Name and phone): | |
| | | |
| | | |
| 7. | Facility Operator/Manager (if different from owner) (Name and phone): | |
| | | |
| 8. | Inspector(s): | |
| ٠, | Name Title/Af | filiation Phone Number |
| . , | (1) | |
| · . · | | |
| , | (2) | |
| <u> </u> | | |
| | (3) | |
| 9. | Original establishment date of facility: | |

18. What types of training activities are conducted at the facility (include safety, emergency procedures, and pollution prevention programs)?

Distribute national or local trade association literature as appropriate to serve as initial contact points.

If not, ensure that the dry cleaner is aware of the role of trade organizations in providing compliance assistance.

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| 19. | Has a p | ollution prev | vention or wa | aste minimization p | lan been developed by | the facility? | Yes [] | No f 1 |
| | If so, d | escribe: | | | | | | |
| ., | ٠. | | | | | | | • |
| | | | | | | 1.0 | P . | |
| 20. - | Has the | | luated which | h wastes are proba | ble candidates for red | uctions through | Yes [] | revention No [] |
| | If so, 1 | ist the wastes | and describ | e pollution prevent | on activities currently | being undertal | ken. | |
| | | | . " | | | | | |
| ` | | | | | | | | |
| 21. | Is the f | acility owner | r familiar wi | th multiprocess wet | cleaning? | | Yes [] | No [] |
| | Has the | facility con | sidered expe | rimenting with mul | tiprocess wet cleaning | ? | Yes [] | No [] |
| • | | | | | · . | | ٠, | 4 . |
| II, | DRY | CLEANING | PROCESS | AREA | | | | |
| | b | looning/Con | oral Faulan | nent Information | | | | |
| Α. | | | | • | | | | |
| 22. | Supply | the followin | g informatio | n about the dry clea | aning machines in use | at the facility: | | |
| , | Type | Date Installed | New or Existing | Manufacturer and model number | Perc filtration system(s)" | Perc vapor recovery system ¹⁸ | Installation perc va recovery | apor |
| 1 | | | | | V | 7.7 | | , . |
| 2. | | | | | | | | 1.00 |
| . 3 | | | | | | , . | <u> </u> | |
| *List | all types | or Transfer of filters used condenser (R | 1 | adsorber (CA) | | | | |
| . ' | | | | | | | | |
| 23. | New to | ansfer mach | ines are no l | onger allowed. Is | the facility in complian | nce? | Yes [] | No [] |
| 24. | If exist | ing transfer n k period wo | nachines are u | used, has the facility purchase of a dry | y performed a thoroug to-dry machine? | h cost analysis | to determine Yes [] | what the No[] |
| 25. | | g transfer m facility in co | | ajor sources must b | e surrounded in a roo | m enclosure by | Yes [] | 23, 1996. No [] |
| 26. | | any carbon a September 2 | | at are used as perc | vapor recovery system | ns for drying p | rocess vapor Yes [] | s installed No [] |
| 27. | | | | ** | al perc recovery syste | * | | |

| В. | Refrigerated | Condensers | Performance | Monitoring |
|----|--------------|------------|-------------|------------|
|----|--------------|------------|-------------|------------|

- 28. Are temperature sensors for refrigerated condensers installed for each machine in accordance with manufacturers' specifications?

 Yes [] No []
- Are temperature sensors for all machines designed to measure temperatures from 32°F to 120°F to an accuracy of ±2°F?
 Yes [] No []
- Record temperature sensor readings if available:

| Temperature Sensor | Machine #1 | Machine #2 | Machine #3 | Criteria for compliance |
|--|---------------|---------------|---------------|-------------------------------|
| (a) Dryer airstream at condenser outlet (°F) | | | · . | Less than or equal to 45°F |
| (b) Washer airstream at condenser inlet (°F) | | 1 1 | | none |
| (c) Washer airstream at condenser outlet (*F) | ., | | | none |
| (d) Washer airstream net temp. drop {(b) - (c)} (°F) | | | | At least 20°F |
| (e) In compliance? (Y/N) | | ` | | 469 |

C. Carbon Adsorber Performance Monitoring (complete if carbon adsorbers are used)

- 31. Are sampling ports for carbon adsorbers properly located in accordance with federal regulations (8 duct diameters downstream and 2 duct diameters upstream of any flow disturbance)?

 Yes [] No []
- 32. Are they kept closed when not in use?

| Yes [| 1 | No [| 1 |
|-------|---|------|---|

33. Indicate the established period desorption schedule for each machine (as necessary, as indicated by tests, but at least weekly). Note the date when each adsorber was last desorbed and measure the perc concentration in the exhaust with a colorimetric detector while the drying cycle is on. (Note: It is important to note that the perc concentration should usually be measured at the end of a use cycle, just prior to desorption. A measurement taken at any other time only ensures that the adsorber is in compliance at that time; not necessarily for the duration of the use cycle. However, given time and logistical limitations, inspections schedules generally cannot accommodate desorption schedules for each machine.

| M | 1achin | ė | Indicate Periodic Desorption Schedule | Date Last Desorbed | Measured Perc Concentration in Exhaust Airstream | Use of Carbon Adsorber (A,B, or C as indicated by table below)" | Perc Concentration Limit (as indicated by table below) ¹¹ |
|---|--------|---|---|-----------------------|--|---|--|
| Г | | | | | | 1 5 7 7 7 | |
| 1 | 1 | | | 1 | | | |
| - | | 4 | - | ' . | 11. | | |
| | 2 | | | | | | |
| - | ų. | | | | | | |
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ⁱIndicate schedule specifics (day of week, etc.)

| Carbon adsorber is used: | Indicate with | Perc Limit (ppm) |
|--|---------------|------------------|
| As main perc vapor recovery system | A | 100 |
| As residual vapor recovery system (tested during aeration while the door is open) | В | 100 |
| As residual vapor recovery system (tested during aeration while the door is closed) | C | 300 |

| D. | Leak Detection | |
|-----|--|---|
| 34. | Is the odor of perc readily detectable anywhere in the facility? Yes [] No [| |
| | If so, where? | |
| 35. | Is the leak detection program conducted weekly or biweekly as required? Yes [] No [| : |
| 36. | Allow owner or designated representative to guide you through the facility and demonstrate procedures for weekly/biweekly leak detection inspection for each machine. The inspection should include the items listellow. Tabulate results and record any leaks detected. | |
| | Inspection done by: | |
| • | [] Sight, smell, and feel [] Monitoring instrument (Type: | _ |

| | | Signs of Leaking (Y, N, n/a)? | | N, n/a)? | |
|------|---|-------------------------------|---------------|---------------|---------------------------------------|
| # | Components: | Machine #1 | Machine #2 | Machine #3 | Explain all "Yes" answers: |
| 1 | Hose & pipe connections, fittings, couplings, valves | | | | |
| 2 | Door gaskets & seatings | | | | |
| 3 | Pumps | | | | |
| . 4 | Solvent tank & containers | | | | |
| 5 | Water separators | | | | |
| 6 | Muck cookers | | | | |
| 7 | Stills | | - 1 | | |
| 8 - | Exhaust dampers | | | • | |
| 9 | Diverter valves | | | | |
| . 10 | Filter gaskets and seatings | | 1 | | · · · · · · · · · · · · · · · · · · · |
| -1i | Cartridge filter housings | | | | |

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| 3 7 . | Are seals and gaskets periodically replaced before they become brittle? | Yes | ιĭ | No [|] |
|--------------|--|-------|------------|--------|----|
| 38. | What type of solvent leak detection systems are in use? | | | | |
| | | 4 | | | r |
| 39. | What other methods does the facility use to detect leaks? (e.g., drip pans, etc.) | | | | |
| | | ' | | | |
| 40. | In transfer machines, is the exhaust damper easily accessible? | Yes | [] | . No [| 1 |
| | If not, is there a suitable outlet downstream for testing the proper closure of the exhaust of | | | | |
| . ' | | Yes | Ι], | No [| 1 |
| E. | Miscellaneous Operation and Maintenance | | | | |
| ٠. | | | | | |
| 41. | Are all machines operated as per manufacturer's specifications and recommendations? | · Yes | 11 | No [| 1 |
| 42. | Are machine doors kept closed except when transferring clothes? | | E I | No [| - |
| | | | | | |
| 43. | Are all spent cartridges drained at least 24 hours before disposal? | Yes | [-] | No [|] |
| | Alternatively, are they steam stripped before disposal? | Yes | [] | No [|) |
| | | Ξ. | | | |
| ш. | PERC AND PERC WASTE HANDLING AREAS | | | | 1 |
| Α. | Perc Storage and Dispensing | , - | | | |
| 44. | Is perc stored on-site? | Yes | [] | No [| 1 |
| | If so, is all perc stored in tightly sealed containers and free from leakage? | Yes | [] | No [| J |
| 45. | How frequently is perc delivery available? | | . ' | | |
| | | | | | ٠. |
| | | ٠, : | | | |
| 46. | How is perc delivered to the dry cleaning machines? | | | ٠ | |
| | | | | ٠. | |
| В. | Satellite Waste Accumulation Area | | | | |
| 47. | Do satellite waste accumulation areas contain less than 55 gallons of accumulating wastes | ? | | | |
| | | Yes | [] | No [|] |
| 48. | Are all full containers sealed and dated less than 3 days (72 hours) ago? | Yes | {] | No [|] |

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|------------|---|---------|--------|---------|
| | | + | .,, | |
| 49. | Are all containers tightly closed and free from leakage? | Yes [|] | No [|
| 50. | Are all containers clearly marked as hazardous waste? | Yes [|] | No [|
| | | | | ٠. |
| C . | Hazardous Waste Storage Area | · . | | |
| 51. | Are all containers tightly closed and free from leakage or deterioration? | Yes [|] | No [|
| 52. | Are all containers clearly marked as hazardous waste? | Yes [|] | No [|
| 53. | Do all containers bear a date representing the day the container was filled and designated for d | lisposa | al/tro | eatment |
| | | Yes [| 1. | No [|
| 54. | Are all the dates on the containers in compliance with on-site waste storage time limits hazardous wastes? (No limit for CESQGs, 180 days for SQGs, 270 days for SQGs that n wastes 200 miles.) | | ansp | |
| | | | 7 | |
| ٠. | Note the date of oldest container: | | | |
| | If the time limit is exceeded, does the facility have the required EPA permit for storage fac | ilitiaa | 2 | |
| | | | | No [|
| 55. | The facility must not be storing quantities of waste in excess of the quantity storage limits. It the facility is in compliance as follows: | Detern | nine | whethe |
| | Determine the total weight of all perc wastes in the storage area. | , | | |
| | Each 15-gallon container can hold about 120 lbs (55 kg) of perc waste. | | | , . |
| , | Each 55-gallon container can hold about 440 lbs (200 kg) of perc waste. Maximum quantity limits are as follows: CESQG—2,200 lbs; SQG—13,200 lbs. | | | |
| | For 15-gallon containers: | | - | |
| | × 120 lbs/container = lbs in storage | | ٠, | |
| | # of full containers: | ٠. | | |
| • | For 55-gallon containers: | | | |
| | × 440 lbs/container = lbs in storage | | | |
| | # of full containers | | | |

On-site storage quantity limit (lbs):

Is the facility in compliance?

| D. | Hazardous Wastes Shipping | | |
|-------|---|---------------------------------------|--------|
| 56. | Does the facility ship hazardous wastes off-site? | Yes [] | No[] |
| 57. | Does the facility track the wastes with a manifest form? | Yes[] | No[] |
| 58. | Are all containers labeled with the 4-inch DOT POISON label? | Yes [] | No[] |
| 59. | Are all containers marked with the proper DOT shipping name and number? | Yes[] | No[] |
| Е. | Wastewater Management | | |
| 60. | Does the facility discharge industrial wastewater into the following? | | |
| 2 | Municipal sewer | Yes [] | No[] |
| | On-site disposal system which meets the definition of injection well | Yes [] | No[] |
| ٠. | Holding tank | Yes[] | No[] |
| For a | discharges to municipal sewers: | · . · · · · . | . • |
| 61. | Does the facility have a current wastewater permit? | Yes [] | No[] |
| | If not, has the facility applied for a new permit? | Yes [] | No [] |
| 62. | What parameters are limited and/or monitored in the facility's permit? | | |
| | Parameter Limit Monit | oring Frequ | ency |
| | (1) | ·: · | |
| - | | | |
| | (2) | ··· . | |
| | (3) | · · · · · · · · · · · · · · · · · · · | 3 - |
| | | | |
| 63. | Is monitoring conducted as required by the permit (with respect to sampling location, frequency | iency)? Yes [] | No. |
| | Does the facility have a sampling point available which is representative of its process wast | | |
| 64. | | | No [] |
| 65. | Is the effluent currently in compliance with the limitations established in the permit? | Yes [] | No[] |

samples or actions.

| | | | • 1 | | , |
|------|---|-------------------|---------------|----------------|----|
| 66. | Has the discharge changed significantly since the permit was issued? | Yes [| .] | No [|] |
| | If so, was the permitting authority notified? | Yes [| j | No [|] |
| , ' | Describe the changes. | · . | | ÷. | |
| | | | | , - | |
| 67. | Describe any wastewater treatment employed at the facility. | | | | |
| . • | | | | | |
| 68. | If the facility discharges to a POTW, has it complied with the recordkeeping and representation of the contained in 40 CFR 403.12(o)? | orting 1 Yes [| requ | iremen No [| |
| 69. | Has the facility ever discharged 15 kg of perc to the POTW within a calendar month? | · · · · | , | | |
| | | Yes [| 1. | No [|] |
| | If so, were the proper authorities notified of the release? | Yes [| J | No [|] |
| For | discharges to injection wells: | ٠. | | | |
| 70. | Does the facility have a Federal or State UIC permits? | Yes [|]. | No [|] |
| 71. | Does the facility dispose of perc wastes and/or other hazardous chemicals in the injection | | | | |
| | | Yes [| 1 | No [. |] |
| For | discharges to holding tanks: | (| | | |
| 72, | Does the facility have the tank pumped out regularly by a licensed waste hauler for proper | ,Yiega[l | d j sj |) laktor |] |
| ıv. | RECORDS AND FILES INSPECTION . | | | , | |
| A. : | Reporting | . *. | | .: | |
| 73. | Did the facility file an initial report with EPA (by June 18, 1994, or upon startup for new | | | | , |
| | Date filed: | Yes [| , | No [| |
| 74. | Did the facility file a compliance report (within 30 days of startup or 30 days after NESH. | AP reg | ulat | ions tal | ke |
| | effect)? | Yes [| | .No [| |
| 4 | Date filed: | | , | 2.0 | |

If not, describe all violations found, including parameter limit exceeded, date of violation, and any follow-up

Note to inspector: Ask to see copies of the initial report and compliance report.

| В. | Recordkeeping | | |
|-----|---|-----------------|-------------------|
| 75. | Are the results of temperature sensor monitoring for refrigerated condensers kept on record of operations? | | 5 years No [] |
| ٠, | Do the results show that all refrigerated condensers are in compliance with performance | | |
| ٠. | | Yes [] | No[] |
| 76. | Are the results of colorimetric tube monitoring for carbon adsorbers kept on record for | or the past 5 y | ears of |
| | operations? | | No[] |
| | Has a periodic (at least weekly) desorption schedule been established and adhered to for | each adsorber | ? |
| | | | No[] |
| - ; | Does monitoring of adsorbers take place during the last run prior to desorption? | Yes [] | No.[] |
| | Do the results show that all carbon adsorbers are in compliance with performance requi | rements? | |
| | | | No [] |
| 77. | Are monthly totals of perc purchase records kept on-site for the past 5 years? | Yes [] | No[]. |
| 78. | Are records of weekly/biweekly inspections for leaks available for each machine for the startup of facility)? | last 5 years (o | |
| 79. | Are any detected leaks repaired within 24 hours whenever possible? | Yes [] | Nó [.] |
| 80. | Are all needed repair parts ordered within 2 working days? | Yes [] | No[] |
| 81. | Are needed repair parts installed within 5 days of receipt? | Yes [] | No [] |
| 82. | Note any recurring problems: | | ٠. |
| | | | . • |
| 83. | Are copies of manifest forms maintained on-site for 3 years? | Yes [] | No [] |
| 84. | Are any return copies of manifest forms (from the waste receiving facility) missing? | Yes[] | No[] |
| | | 103[] | MOL 1 |
| 85. | If so, have exception reports been filed and copies maintained on-site? | Yes [] | No [] |
| | What action has been taken to determine the status of the waste shipment or notify the p | roper authorit | ies? |

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|-------------------|----------|--------------|--------------|
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| | | | |

86. Are copies of the design specifications and operating manuals for each dry cleaning system and each emission control device kept on-site at the facility?

Yes [] No []

| | | | ٠. | |
|--|------------|---------|--------------|---------|
| 87. Has the solvent mileage been calculated for each machine? | · . | | Yes [·] | No[] |
| If so, record the results (gallons perc/1,000 lb clothes) | · · · | • | · | |
| If not, does the facility owner understand how to calculate solver | nt mileage | and how | to use it as | a waste |

Multimedia Inspection Checklist

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V. ADDITIONAL COMMENTS

