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Asbestos NESHAP Milling, Manufacturing, And Fabricating Operations

Field Inspection Checklist

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U.S. Environmental Protection Agency
Office Of Air Quality Planning And Standards
Stationary Source Compliance Division
Washington DC 20460

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DISCLAIMER

This checklist was prepared by Alliance Technologies Corporation for the Stationary Source Compliance Division of the U.S. Environmental Protection Agency. It has been completed in accordance with EPA Contract No. 68-02-4465, Work Assignment No. 92-218. This document is intended for information purposes ONLY, and may not in any way be interpreted to alter or replace the coverage or requirements of the asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, Subpart M.

ASBESTOS NESHAP
MILLING, MANUFACTURING & FABRICATING OPERATIONS
COMPLIANCE INSPECTION CHECKLISTS

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ASBESTOS NESHAP
MILLING, MANUFACTURING & FABRICATING OPERATIONS
FIELD INSPECTION CHECKLIST

I. GENERAL INFORMATION:

Site Name: _____
Location: _____
Date of Inspection: _____
Time of Inspection: _____am/pm

II. FACILITY INFORMATION:

Type of Facility: Milling _____ Manufacturing _____ Fabricating _____

Material Manufactured (if applicable):

1. cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials ___
2. cement products ___
3. fireproofing and insulating materials ___
4. friction products ___
5. paper, millboard, and felt ___
6. floor tile ___
7. paints, coatings, caulks, adhesives, and sealants ___
8. plastics and rubber materials ___
9. chlorine utilizing asbestos diaphragm technology ___
10. shotgun shell wads ___
11. asphalt concrete ___

Typical Operating Hours:_____
Date Construction of Facility Commenced:_____
Date Facility Commenced Asbestos-Related Operations:_____
Date Modification of Facility Commenced:_____

A. Reason for Inspection:

Routine Compliance ( ) Citizen Complaint ( )
State Oversight/Joint ( )

B. Site Conditions:

Ambient Air Temperature: _____°C/°F
Wind Description:_____

Wind Direction: _____
Visibility: _____
(i.e., clear, partly cloudy, overcast . . .)
Other Conditions: _____
(i.e., drizzle, rain, sleet, snow . . .)

C. **Owner Information:**
Name: _____
Address: _____
_____
Phone Number: ( )_____

D. **Operator Information:**
Company Name: _____
Address: _____
_____
Phone Number: ( )_____
Contact Person: _____
Title: _____

III. PRE-INSPECTION INTERVIEW:

1. Credentials Shown — Yes No
   a. agency identification ___ ___
   b. medical monitoring certification ___ ___

2. Name and title of person being interviewed:
   _____
   _____

3. Company: _____

4. Principle Product Produced: _____

5. **Process Information:**
   a) Description: _____
   _____
   _____
   _____
   b) Amount of asbestos-containing material produced by the facility: _____
   c) Dates of operation: _____
   d) Does the source use a spray-on method? Y__ N__. If yes, was EPA informed of the process 20 days prior to the application? Y__ N__.

6. Control Equipment/Measures: _____
   _____
   _____
   _____
   _____
   _____

7. Are HEPA vacuums available on-site? _____

8. Waste Handling Procedures: _____

9. Is there an **active** waste disposal facility on site? _____

10. Is there an **inactive** waste disposal facility on site? _____

11. Disposal Procedures: _____

12. Primary waste transporter:
Name: _____
Address: _____
Telephone: _____

13. Primary ACWM waste disposal site:
Name: _____
Address: _____
Telephone: _____

14. Interview Notes/Comments: _____

IV. INSPECTION:

1. Using the space provided, draw a general location map of the facility. Note land use surrounding site (residential, industrial, recreational). Estimate and indicate dimensions and distances as accurately as possible.

2. Using the space provided, draw a sketch of the process and control equipment locations. Note sample and photograph locations.

3. Which of the following emission control options has the facility selected?

   a. Discharge no visible emissions to the outside air ___; or
   b. Use a fabric filter collection device ___; or
   c. Use an Administrator-approved wet collector ___; or
   d. Use a HEPA filter certified to be 99.97% efficient for 0.3 micron particles ___; or
   e. Use other Administrator-approved filtering equipment ___.

4. Describe any visible emissions seen: _____

_____

_____

_____

	Yes	No
5. Is the facility using a fabric filter collection device?	___	___

If yes,

a. Is the facility using woven ___ or felted fabric ___ filters?
b. How does the facility ensure that the airflow specifications for these filters are not exceeded? _____

_____

_____

_____

c. What is the current manometer reading of the pressure drop across the fabric filter of the air cleaning device?_____

_____

d. Was the fabric collection device installed after January 10, 1989?	___	___
If yes, have provisions been made for easy inspection for faulty bags (61.152(a)(3))?	___	___

e. Weight of felted fabric in g/m^2: _____

6. Visible emission monitoring

a. Is visible emission monitoring performed once per day during daylight operating hours for at least 15 seconds per emission source?	___	___

b. Who conducts the visible emission monitoring?
   Name:_____
   Title: _____

c. Comments: _____

_____

_____

_____

	Yes	No
7. Conduct walkthrough and identify monitoring sites. Does the facility monitor each of these potential sources?	___	___

Comments:_____

_____

_____

_____

8. Are records of the results of visible emission monitoring and air cleaning device inspections maintained?. ___ ___

If yes, is the following information included?

a. Date and time of each inspection. ___ ___

b. Presence or absence of visible emissions. ___ ___

c. Condition of fabric filters, including presence of any tears, holes, and abrasions. ___ ___

d. Presence of dust deposits on clean sides of fabric filters. ___ ___

e. Brief description of corrective actions taken, including date and time. ___ ___

f. Daily hours of operation for each air cleaning device. ___ ___

Comments:_____

_____

_____

_____

_____

_____

9. Are the records made available for this inspection? ___ ___

10. Are air cleaning devices used onsite? ___ ___

If yes,

a. Is each air cleaning device inspected at least once per week for proper operations and for changes that signal the potential for malfunctions? ___ ___

or

b. For air cleaning devices that cannot be inspected on a weekly basis:

i. Has a written maintenance plan been submitted to the Administrator? ___ ___

ii. Does the plan include a:

	Yes	No
Maintenance schedule?	___	___
Recordkeeping plan?	___	___

iii. Has the plan been revised since submission? ___ ___

If yes, has the administrator been sent the revised plan? ___ ___

c. Who conducts the air cleaning device inspections?

Name:_____

Title:_____

11. Has the facility retained a copy of all monitoring and inspection records for at least two years? ___ ___

12. Are monitoring and inspection records available for inspection? ___ ___

13. Have any visible emissions been recorded during visible emission monitoring? ___ ___

If yes, has the facility submitted a copy of the visible emission monitoring records to the Administrator within 30 days of the end of the quarter when visible emissions occurred? (Quarterly reports are due April 30, July 30, October 30 and January 30). ___ ___

Comments:_____

WASTE DISPOSAL REQUIREMENTS FOR MANUFACTURING AND FABRICATING OPERATIONS

All asbestos-containing waste material must be deposited at a waste disposal site operated in accordance with the provisions of Sec. 61.154.

1. Describe waste materials: _____

2. Describe waste handling procedures: _____

Yes No

3. Has the source chosen to discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, or transporting of any ACWM generated? ___ ___

or

Does it use one of the following emission control and waste treatment methods? ___ ___

a. Adequately wet asbestos-containing waste material as follows:

i. Mix control device asbestos waste to form a slurry (Sec. 61.150(a)(1)(i)); ___ ___

Adequately wet other asbestos waste material (Sec. 61.150(a)(1)(i)); and ___ ___

ii. Discharge no visible emissions to the outside air from collection, mixing, wetting, and/or handling operations (Sec. 61.150(a)(1)(ii)) or use methods of Sec. 61.152; ___ ___

iii. Seal all asbestos-containing waste material in leak-tight containers while wet (Sec. 61.150(a)(1)(iii)); or ___ ___

For materials that will not fit into leak-tight containers without additional breakage, put materials into leak-tight wrapping; **and** ___ ___

iv. Label the containers or wrapped materials as follows:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

or

Yes No

b. Process asbestos-containing waste material into nonfriable forms as follows:

i. Form all asbestos-containing waste into nonfriable pellets or other shapes; ___ ___

ii. Discharge no visible emissions to the outside air from collection and processing operations, including incineration or; ___ ___

iii. Use the method specified by Sec. 61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; ___ ___

or

c. Use an alternative emission control and waste treatment method that has received prior approval by the Administrator. ___ ___

4. Is ACWM transported offsite to a disposal site? ___ ___

If yes,

a. Are the containers or wrapped ACWM materials labeled with the ___ ___

i. name of the waste generator and ___ ___

ii. location at which the waste was generated? ___ ___

b. Is waste deposited as soon as practical at an ___ ___

i. active waste disposal site operated in accordance with the provisions of Sec. 61.154? ___ ___

or

ii. an EPA-approved site that converts asbestos-containing waste into non-asbestos (asbestos-free) material in accordance with Sec. 61.155? ___ ___

WASTE DISPOSAL FOR ASBESTOS MILLS

All asbestos-containing waste material must be deposited at a waste disposal site operated in accordance with the provisions of Sec. 61.154.

1. Describe waste materials: _____

2. Describe waste handling procedures: _____

3. Emission control

   a. Which of the following has the facility chosen to do?

      i. Discharge no visible emissions to the outside air from the transfer of control asbestos waste to the tailings conveyor ___; or

      ii. Use a fabric filter collection device ___; or

      iii. Use an Administrator-approved wet collector ___; or

      iv. Use a HEPA filter certified to be 99.97% efficient for 0.3 micron particles ___; or

      v. Use other Administrator-approved filtering equipment? ___

	Yes	No
b. Is the asbestos waste from control devices disposed of in accordance with Sec. 61.150(a) (see item 3 on the checklist for WASTE DISPOSAL FOR MANUFACTURING AND FABRICATING OPERATIONS) or 61.149(c)? (See item 4 of this checklist).	___	___

			Yes	No
4.	a.	Has the facility chosen to discharge no visible emissions to the outside air during the collection, processing, packaging, or on-site transporting of any asbestos-containing waste material?	___	___
		or		
	b.	Use one of the following methods?	___	___
		i. Adequately mix all asbestos-containing waste material with a wetting agent to effectively wet dust and tailings before depositing the material at a waste disposal site.	___	___
		Is the wetting agent being used as recommended by the manufacturer?	___	___
		ii. Discharge no visible emissions to the outside air from the wetting operation; or	___	___
		Use the methods specified in Sec. 61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.	___	___
		iii. Use an alternative emission control and waste treatment method that has received prior written approval from the Administrator.	___	___
5.	Are wetting operations conducted at the site?		___	___
	If yes,			
	Have wetting operations at the waste disposal site ever been suspended due to temperatures < -9.5°c?		___	___
	If yes:			
	a.	Has the temperature been recorded at least at hourly intervals, and	___	___
	b.	Have records been kept in suitable form for inspection for at least two years?	___	___

6. Record any visible emissions observed. _____

_____

_____

_____

_____

_____

OFFSITE TRANSPORT REQUIREMENTS FOR DISPOSAL OF ACWM FROM MILLING, MANUFACTURING AND FABRICATING OPERATIONS

Yes No

1. Are vehicles used to transport ACWM marked as follows during the loading and unloading of waste? ___ ___

DANGER
ASBESTOS DUST HAZARD
CANCER AND LUNG DISEASE HAZARD
Authorized Personnel Only

2. Are Waste Shipment Records (WSRs) with the following minimum information maintained?

   a. Name, address, and telephone number of the waste generator. ___ ___

   b. Name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program. ___ ___

   c. The approximate quantity in cubic meters (cubic yards). ___ ___

   d. The name and telephone number of the disposal site operator. ___ ___

   e. The name and physical site location of the disposal site. ___ ___

   f. The date transported. ___ ___

   g. The name, address and telephone number of the transporter(s). ___ ___

   h. A certification that the contents of the consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and government regulations. ___ ___

   Comments:_____
   _____
   _____
   _____

3. Is a copy of the WSR provided to the disposal site owner at the time of delivery of the asbestos-containing waste to the disposal site? ___ ___

Yes No

4. Have signed WSRs been returned by the waste disposal site within 35 days of the date the initial transporter accepted the waste? ___ ___

If no:

a. Was the initial transporter and/or the owner operator of the waste disposal site contacted to determine the status of the waste shipment? ___ ___

b. If a signed copy of the Waste Shipment Record was not received within 45 days of the date the initial transporter accepted the waste, was the agency which administers the asbestos NESHAP program for the waste generator notified in writing?

If yes, was the following information submitted? ___ ___

i. A copy of the Waste Shipment Record for which a confirmation of delivery was not received; ___ ___

and

ii. A cover letter signed by the waste generator explaining the efforts to locate the asbestos waste shipment and the results of those efforts. ___ ___

5. Are copies of the Waste Shipment Records signed by the owner or operator of the waste disposal site maintained for at least two years? ___ ___

Comments: _____

_____

_____

_____

_____

REPORTING REQUIREMENTS FOR MILLING, MANUFACTURING AND FABRICATING FACILITIES

		Yes	No	NA
1.	Has the source submitted information to the Administrator as required by Sec. 61.153 (Reporting)?	___	___	
	If yes, examine the source information submitted and indicate whether the following required items are present:			
	a. A description of the emission control equipment used for each process.	___	___	___
	b. Fabric filter information:			
	i. The airflow permeability in $m^3/min/min^2$ ($ft^3/min/ft^2$) of a woven fabric filter;	___	___	___
	whether the fill yarn of a synthetic fabric filter is spun or not spun; and	___	___	___
	ii. For felted fabrics:			
	the density in g/m^2 (oz/yd^2),	___	___	
	the minimum thickness in mm (inches), and	___	___	
	the airflow permeability in $m^3/min/m^2$ ($ft^3/min/ft^2$).	___	___	
	c. A copy of the certified efficiency of the HEPA filter used.	___	___	___
	d. A brief description of each process that generates asbestos-containing waste material.	___	___	
	e. The average volume of asbestos-containing waste material disposed of, measured in m^3/day (yd^3/day).	___	___	
	f. The emission control methods used in all stages of waste disposal.	___	___	
	g. The type of disposal site or incineration site for ultimate disposal.	___	___	

Yes No

h. Disposal site or incineration site information:

i. Name of operator _____
ii. Name of disposal site _____
iii. Location _____

2. Is this facility a new source (i.e., construction commenced before 01/10/89)? ___ ___

If yes,

a. Did the source have an initial startup date before November 20, 1990? ___ ___

If yes,

Did the source provide the above information to the Administrator by February 18, 1991? ___ ___

If no,

i. What was the startup date? _____
ii. Was the information submitted within 90 days? ___ ___

3. Is the facility an existing source? ___ ___

a. Has the source previously supplied this information to the Administrator? ___ ___

If no, was the information submitted by February 18, 1991? ___ ___

4. New/Existing Sources:

a. Have there been any changes in the information submitted? ___ ___

If yes,

Has the Administrator been informed in writing within 30 days of these changes? ___ ___

b. For new/existing sources with an initial startup date before November 20, 1990, has the following information been submitted to the Administrator by February 18, 1991? ___ ___

i. Name and address of the owner or operator. ___ ___

ii. The location of the source. ___ ___

iii. The type of hazardous pollutants emitted by the source. ___ ___

		Yes	No
iv.	A brief description of the nature, size, design and operation of the source (include operating design capacity and identify each point of emission for each hazardous pollutant).	___	___
v.	The average weight per month of the hazardous pollutant.	___	___
vi.	A description of the existing control equipment.	___	___
vii.	A statement by the owner or operator as to whether the source can comply with the standards within 90 days of the effective date of the regulation.	___	___

V. POST INSPECTION INTERVIEW:

Summary of facility inspection:

Summary of recommendations/discussion with owner/operator:

Additional Comments:

Inspector Signature Date

SAMPLE COLLECTION LOG

Facility Name _____

Facility Address _____

_____

Sampler(s) _____

_____

Date Sampled _____

SAMPLE NUMBER	SAMPLE LOCATION	SAMPLE DESCRIPTION	TIME SAMPLE TAKEN	COMMENTS

Attachment A
Sample Collection Log

Attachment B
Photo Identification Log Sheet

Name/Address of Facility: _____

_____

Date: _____ **Inspector (photographer):** _____

Frame No.	Time	Sample No.	Description

Remarks: _____

_____

Inspector Signature: _____