# CHAPTER 33.1-15-13
# EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Section
33.1-15-13-01 [Reserved]
33.1-15-13-01.1 Scope
33.1-15-13-01.2 Emission Standards
33.1-15-13-02 Emission Standard for Asbestos

**33.1-15-13-01. [Reserved].**

**33.1-15-13-01.1. Scope.**

The subparts and appendices of title 40 Code of Federal Regulations part 61, as they exist on July 2, 2010, which are listed under section 33.1-15-13-01.2 are incorporated into this chapter by reference. Any changes to the emission standard are listed below the title of the standard.

**History:** Effective January 1, 2019.
**General Authority:** NDCC 23.1-06-04; S.L. 2017, ch. 199, § 1
**Law Implemented:** NDCC 23.1-06-04; S.L. 2017, ch. 199, § 21

**33.1-15-13-01.2. Emission standards.**

Subpart A - General provisions.

*61.02 - The definition of administrator is deleted and replaced with the following:

Administrator means the department except for those duties that cannot be delegated by the United States environmental protection agency. For those duties that cannot be delegated, administrator means the administrator of the United States environmental protection agency.

The following definition is added:

"Waiver of compliance" means a permit to operate with a compliance schedule.

*Sections 61.07 and 61.08 are deleted in their entirety and replaced with the following:

Application for permit to construct. The owner or operator of any new source to which a standard prescribed under these subparts is applicable, prior to the date on which construction or modification is planned to commence, shall apply for and receive a permit to construct as provided in section 33.1-15-14-02. For those sources on which construction or modification has commenced and initial startup has not occurred prior to the effective date of a standard of this chapter, the owner or operator shall apply for a permit to construct within thirty days after the effective date of the standard.

Neither the submission of an application for a permit to construct nor the administrator's approval of construction or modification shall:

(1) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this chapter or of any other applicable federal, state, or local requirement; or

(2) Prevent the administrator from implementing or enforcing this chapter or taking any other action under this article.

*61.09(b) is deleted in its entirety.

*61.11(f) is deleted in its entirety and replaced with the following:

(f) The granting of a permit under this section does not abrogate the department's authority under section 33.1-15-01-06 and subsection 9 of section 33.1-15-14-02, and subsection 6 of section 33.1-15-14-03.

*61.16 is deleted in its entirety and replaced with the following:

Availability of information.

a. Emission data provided to, or otherwise obtained by, the department in accordance with the provisions of this chapter must be available to the public.

b. Any records, reports, or information, other than emission data, provided to, or otherwise obtained by, the department in accordance with the provisions of this chapter must be available to the public, except that upon a showing satisfactory to the department by any person that such records, reports, or information, or particular part thereof (other than emission data), if made public, would divulge methods or processes entitled to protection as trade secrets of such person, the department will consider such records, reports, or information, or particular part thereof, confidential in accordance with the purposes of section 1905 of title 18 of the United States Code, except that such records, reports, or information, or particular part thereof, may be disclosed to other officers, employees, or authorized representatives of the state and federal government concerned with carrying out the provisions of North Dakota Century Code chapter 23.1-06 or when relevant in any proceeding under North Dakota Century Code chapter 23.1-06.

*61.17 is deleted in its entirety.

Subpart G - [Reserved].

Subpart J - National emission standard for equipment leaks (fugitive emission sources) of benzene.

Subpart S - [Reserved].

Subpart U - [Reserved].

Subpart V - National emission standard for equipment leaks (fugitive emission sources).

Subpart FF - National emission standard for benzene waste operations.

Appendix A - National emission standards for hazardous air pollutants, compliance status information.

Appendix B - Test methods.

Appendix C - Quality assurance procedures.

**History:** Effective January 1, 2019.
**General Authority:** NDCC 23.1-06-04, 23.1-06-08; S.L. 2017, ch. 199, § 1
**Law Implemented:** NDCC 23.1-06-04, 23.1-06-08; S.L. 2017, ch. 199, § 21

**33.1-15-13-02. Emission standard for asbestos.**

1. **Applicability.** The provisions of this section are applicable to those sources specified in subsections 3 through 17.

2. **Definitions.** All terms that are used in this section and are not defined below are given the same meaning as in North Dakota Century Code chapter 23.1-06 and in section 33.1-15-13-01.2.

a. "Active waste disposal site" means any disposal site other than an inactive site.

b. "Adequately wet" means to sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted; however, the absence of visible emissions is not sufficient evidence of being adequately wet.

c. "Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, and actinolite-tremolite.

d. "Asbestos abatement" means any demolition, renovation, salvage, repair, or construction activity which involves the repair, enclosure, encapsulation, removal, operation and maintenance, handling, or disposal of more than three square feet [0.28 square meters] or three linear feet [0.91 meters] of friable asbestos material. Asbestos abatement also means any inspections, preparation of management plans, and abatement project design for both friable and nonfriable asbestos material.

e. "Asbestos abatement project designer" means any person who develops the plans, specifications, and designs for an asbestos abatement project.

f. "Asbestos abatement project monitor" means any person, employed to monitor an asbestos removal project to ensure any of the following:

(1) The removal is conducted in accordance with state and federal regulations.

(2) State-of-the-art work practices are employed.

(3) The abatement is conducted as designed.

(4) Personal and ambient air samples are collected properly.

Persons acting as the project designer who are not responsible for the proper collection of personal and ambient air samples and employees of the asbestos removal contractor or facility owner are excluded from this definition.

g. "Asbestos abatement supervisor" means any person employed by the asbestos contractor who supervises workers engaged in asbestos removal, encapsulation, enclosure, and repair. Supervisors may include those individuals with the position title of foreman, working foreman, or leadman pursuant to collective bargaining agreements.

h. "Asbestos-containing waste material" means asbestos mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this section. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term includes regulated asbestos-containing material waste and materials contaminated with asbestos, including disposable equipment and clothing.

i. "Asbestos contractor" means any partnership, firm, association, operation, or sole proprietorship that contracts to perform asbestos abatement for another.

j. "Asbestos inspector" means any person who inspects facilities for asbestos-containing materials.

k. "Asbestos management planner" means any person who develops facility plans for the management of asbestos-containing materials.

l. "Asbestos mill" means any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos materials is not considered a part of the asbestos mill.

m. "Asbestos tailings" means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

n. "Asbestos waste from control devices" means any waste material that contains asbestos and is collected by a pollution control device.

o. "Asbestos worker" means an employee or agent of an asbestos contractor, or a public employee engaged in the abatement of more than three square feet [0.28 square meters] or three linear feet [0.91 meters] of friable asbestos material, except for individuals engaged in abatement at their private residence.

p. "Category I nonfriable asbestos-containing material" means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, title 40 Code of Federal Regulations part 763, section 1, polarized light microscopy.

q. "Category II nonfriable asbestos-containing material" means any material, excluding category I nonfriable asbestos-containing material, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, title 40, Code of Federal Regulations, part 763, section 1, polarized light microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure or by mechanical forces expected to act on the material.

r. "Commercial asbestos" means any material containing asbestos that is extracted from ore and has value because of its asbestos content.

s. "Cutting" means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.

t. "Demolition" means the wrecking or taking out of any load-supporting structural member of a facility, together with any related handling operations or the intentional burning of any facility.

u. "Emergency renovation operation" means a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

v. "Encapsulation" means a method of asbestos abatement that includes the treatment of asbestos-containing materials with a sealant material that completely surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers. A bridging encapsulant creates a membrane over the surface while a penetrating encapsulant penetrates the material and binds the material's components together.

w. "Enclosure" means a method of asbestos abatement that includes the construction of a permanent, airtight, impermeable barrier around asbestos-containing material to prevent the release of asbestos fibers into the air.

x. "Fabricating" means any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the

case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

y. "Facility" means any institutional, commercial, public, industrial, or residential structure, installation, or building, including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units; any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation, or building that was previously subject to this section is not excluded, regardless of its current use or function.

z. "Facility component" means any part of a facility including equipment.

aa. "Friable asbestos-containing material" means any material containing more than one percent asbestos that hand pressure or mechanical forces expected to act on the material can crumble, pulverize, or reduce to powder when dry. The term includes nonfriable asbestos-containing material after such previously nonfriable material becomes damaged to the extent that when dry, it may be crumbled, pulverized, or reduced to powder by hand pressure. The percentage of asbestos is determined using the method specified in appendix A, subpart F, title 40 Code of Federal Regulations part 763, section 1, polarized light microscopy. If the asbestos content is greater than zero percent, assume the material contains greater than one percent asbestos or verify the asbestos content by point counting using polarized light microscopy. If a result obtained by point count is different from a result obtained by visual estimation, the point count result will be used.

bb. "Fugitive source" means any source of emissions not controlled by an air pollution control device.

cc. "Glove-bag" means a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glove-bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation, equipment and supplies, and work practices is contained in the occupational safety and health administration's (OSHA's) final rule on occupational exposure to asbestos, appendix G, title 29 Code of Federal Regulations 1926.58.

dd. "Grinding" means to reduce to powder or small fragments and includes mechanical chipping or drilling.

ee. "In poor condition" means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

ff. "Inactive waste disposal site" means any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year.

gg. "Inspection" means any activity undertaken in a school building, or a public or commercial building, to determine the presence or location, or to assess the condition of, friable or nonfriable asbestos-containing material or suspected asbestos-containing material, whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of friable and nonfriable, known or assumed asbestos-containing material which has been previously identified. The term does not include the following:

(1) Periodic surveillance of the type described in title 40 Code of Federal Regulations 763.92(b), solely for the purpose of recording or reporting a change in the condition of known or assumed asbestos-containing material;

(2) Inspections performed by employees or agents of federal, state, or local governments solely for the purpose of determining compliance with applicable statutes or regulations; or

(3) Visual inspections of the types described in title 40 Code of Federal Regulations 763.90(I), solely for the purpose of determining completion of response actions.

hh. "Installation" means any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

ii. "Leaktight" means that solids or liquids cannot escape or spill out. It also means dusttight.

jj. "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operations, or any other preventable upset conditions, equipment breakdown, or process failure.

kk. "Manufacturing" means the combining of commercial asbestos, or in the case of woven friction products, the combining of textiles containing commercial asbestos, with any other materials, including commercial asbestos, and the processing of this combination into a product. Chlorine production is considered a part of manufacturing.

ll. "Natural barrier" means a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes, or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

mm. "Nonfriable asbestos-containing material" means any material containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, title 40 Code of Federal Regulations part 763, section 1, polarized light microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure or mechanical forces expected to act on the material.

nn. "Nonscheduled renovation operation" means a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.

oo. "Outside air" means the air outside buildings and structures, including the air under a bridge or in an open ferry dock.

pp. "Owner or operator of a demolition or renovation activity" means any person who owns, leases, operates, controls, or supervises a facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operations, or both.

qq. "Particulate asbestos material" means finely divided particles of asbestos or material containing asbestos.

rr. "Planned renovation operations" means a renovation operation, or a number of such operations, in which some regulated asbestos-containing material will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

ss. "Public and commercial building" means the interior space of any building which is not a school building, except that the term does not include any residential apartment building of fewer than ten units or detached single-family homes. The term includes, industrial and office buildings, residential apartment buildings and condominiums of ten or more dwelling units, government-owned buildings, colleges, museums, airports, hospitals, churches, preschools, stores, warehouses, and factories. Interior space includes exterior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

tt. "Public employee" for the purpose of this chapter means any person employed by the United States government or the state of North Dakota or any of its political subdivisions who provides service for which compensation is paid. This includes employment by appointment or election.

uu. "Regulated asbestos-containing material (RACM)" means:

(1) Friable asbestos material.

(2) Category I nonfriable asbestos-containing material that has become friable.

(3) Category I nonfriable asbestos-containing material that will be or has been subjected to sanding, grinding, cutting, or abrading.

(4) Category II nonfriable asbestos-containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces acting on or expected to act on the material in the course of demolition or renovation operations regulated by this section.

vv. "Remove" means to take out regulated asbestos-containing material or facility components that contain or are covered with regulated asbestos-containing material from any facility.

ww. "Renovation" means altering in any way a facility or facility components, including the stripping or removal of regulated asbestos-containing material from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

xx. "Repair" means returning damaged asbestos-containing materials to an undamaged condition or to an intact state so as to prevent asbestos fiber release.

yy. "Resilient floor covering" means asbestos-containing floor tile, including asphalt and vinyl floor tiles and sheet vinyl floor covering containing more than one percent asbestos as determined using polarized light microscopy according to the methods specified in appendix A, subpart F, title 40 Code of Federal Regulations part 763, section 1, polarized light microscopy.

zz. "Roadways" means surfaces on which motor vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

aaa. "Strip" means to take off regulated asbestos-containing material from any part of any facility or facility components.

bbb. "Structural member" means any member of a facility, such as beams, walls, ceilings, floors, etc.

ccc. "Visible emissions" means any emissions which are visually detectable without the aid of instruments, coming from regulated asbestos-containing material or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operations. This does not include condensed uncombined water vapor.

ddd. "Waste generator" means any owner or operator of a source covered by this section whose act or process produces asbestos-containing waste material.

eee. "Waste shipment record" means the shipping document, required to be originated and signed by the waste generator and is used to track and substantiate the disposition of asbestos-containing waste material.

fff. "Working day" means any day Monday through Friday and includes holidays that fall on any day Monday through Friday.

3. **Standard for asbestos mills.**

a. Each owner or operator of an asbestos mill shall either discharge no visible emissions to the outside air from that asbestos mill, including fugitive sources, or use the methods specified by subsection 13 to clean emissions containing asbestos material before they escape to, or are vented to, the outside air.

b. Each owner or operator of an asbestos mill shall meet the following requirements:

(1) Monitor each potential source of asbestos emissions from any part of the mill facility, including air-cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day during daylight hours for visible emissions to the outside air during periods of operation. The monitoring must be by visual observation of at least fifteen seconds duration per source of emissions.

(2) Inspect each air-cleaning device at least once each week for proper operation and for changes that signal the potential for malfunction, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air-cleaning devices that can not be inspected on a weekly basis according to this paragraph, submit to the department, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(a) Maintenance schedule.

(b) Recordkeeping plan.

(3) Maintain records of the results of visible emissions monitoring and air-cleaning device inspections using a suitable form which includes the following information:

(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 side of fabric filters.

(e) Brief description of corrective actions taken including date and time.

(f) Daily hours of operation for each air-cleaning device.

(4) Furnish upon request and make available at the affected facility during normal business hours for inspection by the department all records required under this subdivision.

(5) Retain a copy of all monitoring inspection records for at least two years.

(6) Submit quarterly a copy of visible emissions monitoring records to the department if visible emissions occurred during the report period. Quarterly reports must be postmarked by the thirtieth day following the end of the calendar quarter.

4. **Standard for roadways.** No person may surface a roadway with asbestos tailings or asbestos-containing waste material.

5. **Standard for manufacturing.**

a. Applicability. This section applies to the following manufacturing operations using commercial asbestos.

(1) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials.

(2) The manufacture of cement products.

(3) The manufacture of fireproofing and insulating materials.

(4) The manufacture of friction products.

(5) The manufacture of paper, millboard, and felt.

(6) The manufacture of resilient floor covering.

(7) The manufacture of paints, coatings, caulks, adhesives, and sealants.

(8) The manufacture of plastics and rubber materials.

(9) The manufacture of chlorine utilizing asbestos diaphragm technology.

(10) The manufacture of shotgun shell wads.

(11) The manufacture of asphalt concrete.

b. Standard. Each owner or operator of any of the manufacturing operations to which this section applies shall either:

(1) Discharge no visible emissions to the outside air from these operations or from any building or structure in which they are conducted or from any other fugitive sources.

(2) Use the methods specified by subsection 13 to clean emissions containing asbestos material from these operations before they escape to, or are vented to, the outside air.

(3) Monitor each potential source of asbestos emissions from any part of the manufacturing facility, including air-cleaning devices, process equipment, and buildings housing material processing and handling equipment, at least once each day during daylight hours for visible emission to the outside air during periods of

operation. The monitoring must be by visual observation of at least fifteen seconds duration per source of emissions.

(4) Inspect each air-cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air-cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the department, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(a) Maintenance schedule.

(b) Recordkeeping plans.

(5) Maintain records of the results of visible emission monitoring and air-cleaning device inspections using a suitable form which includes the following information:

(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 side of fabric filters.

(e) Brief description of corrective action taken, including date and time.

(f) Daily hours of operation for each air-cleaning device.

(6) Furnish upon request and make available at the affected facility during normal business hours for inspection by the department all records required under this subdivision.

(7) Retain a copy of all monitoring and inspection records for at least two years.

(8) Submit quarterly a copy of the visible emissions monitoring records to the department if visible emissions occurred during the report period. Quarterly reports must be postmarked by the thirtieth day following the end of the calendar quarter.

6. **Standard for demolition and renovation.**

a. Applicability. To determine which requirements of subdivisions a, b, and c of this subsection apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility, or part of the facility where the demolition or renovation operation will occur, for the presence of asbestos, including category I and category II nonfriable asbestos-containing material. The requirements of subdivisions b and c of this subsection apply to each owner or operator of an asbestos demolition or renovation operation, including the removal of regulated asbestos-containing material, as follows:

(1) For a demolition or renovation project involving the stripping or removal of more than three square feet [0.28 square meters] or three linear feet [0.91 meters] of regulated asbestos-containing material, all the procedural requirements of subdivision c apply, except for ordered demolitions as provided in paragraph 4.

(2) For any facility being demolished, all the notification requirements of subdivision b apply.

(3) For a renovation project where at least one hundred sixty square feet [14.9 square meters] of regulated asbestos-containing material on facility components or at least two hundred sixty linear feet [79.3 meters] of regulated asbestos-containing material on pipes or a total of thirty-five cubic feet [1 cubic meter] of regulated asbestos-containing material on or off facility components are to be stripped, removed, dislodged, cut, drilled, or similarly disturbed at a facility all the notification requirements of subdivision b apply.

(a) To determine whether this paragraph applies to planned renovation operations involving individual nonscheduled operations, predict the additive amount of regulated asbestos-containing material to be removed or stripped over the maximum period of time a prediction can be made, not to exceed one calendar year of January first through December thirty-first.

(b) To determine whether this paragraph applies to emergency renovation operations, estimate the amount of regulated asbestos-containing material to be removed or stripped as a result of the sudden unexpected event that necessitated the renovation.

(4) If the facility is being demolished under an order of a state or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of subdivision b and paragraphs 4, 5, 6, 7, and 8 of subdivision c apply.

(5) Owners or operators of demolition or renovation operations are exempt from the requirements of 61.05(a), 61.07, and 61.09 of the general provisions of this chapter.

b. Notification requirements. Each owner or operator to which this section applies shall:

(1) Provide the department with written notice of the intention to demolish or renovate.

(2) Indicate whether the notice is an original or a revised notification and update the notice as necessary, including when the amount of asbestos affected changes by at least twenty percent.

(3) Postmark or deliver the notice as follows:

(a) At least ten working days before demolition begins, except as provided in subparagraph b.

(b) As early as possible before, but not later than the following working day after, demolition begins if the operation is described in paragraph 4 of subdivision a or for an emergency renovation as described in subparagraph b of paragraph 3 of subdivision a of this subsection.

(c) At least ten working days before the end of the calendar year preceding the year for which notice is being given for renovations described in subparagraph a of paragraph 3 of subdivision a of this subsection.

(d) At least ten working days before renovation begins. When necessary, the department may accept a telephone notification followed by the written notification.

(e) In no event may an operation covered by this subsection begin on a date other than the date contained in the written notice unless the department has been supplied a properly amended notification following the timetables outlined above.

(4) Include the following information on a notification form provided by the department:

(a) Name, address, and telephone number of both the owner and operator and the asbestos removal contractor.

(b) Description of the facility or affected part of the facility being demolished or renovated, including the size, age, and prior and present use of the facility.

(c) An estimate of the amount of regulated asbestos-containing material to be removed from the facility in terms of square feet, linear feet, or cubic feet, as appropriate. Also estimate the approximate amount of category I and category II nonfriable asbestos-containing material in the affected part of the facility that will not be removed before demolition. Also provide the procedures and analytical methods used to detect the presence and determine the quantity of regulated asbestos-containing material and category I and category II nonfriable asbestos-containing material.

(d) Location of the facility being demolished or renovated to include the street address, city, county, and state.

(e) Scheduled starting and completion dates of the asbestos abatement work or any other activity that would break up, dislodge, or similarly disturb asbestos material.

(f) Scheduled starting and completion dates of the demolition or renovation.

(g) Type of operation: demolition or renovation.

(h) A description of the demolition or renovation work to be performed, including the demolition or renovation techniques and methods to be employed during the activity and a description of the affected facility components.

(i) Description of work practices and engineering controls to be used to comply with the requirements of this section, including asbestos removal and waste handling emission control procedures.

(j) The name and location of the waste disposal site where the asbestos-containing waste material will be deposited.

(k) The name, address, and telephone number of the waste transporter.

(l) For emergency renovations, provide the date and hour that the emergency occurred, a description of the sudden unexpected event, and an explanation of how the event caused an unsafe condition or would cause equipment damage or an unreasonable financial burden.

(m) Description of procedures to be followed in the event that unexpected regulated asbestos-containing material is found or category II nonfriable asbestos-containing material becomes crumbled, pulverized, or reduced to powder during the operation.

(n) For facilities described in paragraph 4 of subdivision a, the name, title, and authority of the state or local governmental representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order must be attached to the notification.

(o) A signed statement by the contractor that all asbestos abatement supervisors and asbestos workers assigned to this project are certified by the department, in accordance with subsection 16.

c. Procedures for asbestos emission control. Each owner or asbestos contractor to whom this subsection applies shall comply with the following procedures:

(1) Remove all regulated asbestos-containing material from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the materials or preclude access to the materials for subsequent removal. Asbestos-containing material need not be removed before demolition if:

(a) It is category I nonfriable asbestos-containing material that is not in poor condition and is not friable.

(b) It is on a facility component that is encased in concrete or other similarly hard material and adequately wetted whenever exposed during demolition and maintained wet until it is disposed of in accordance with subsection 11.

(c) It was not accessible for testing and therefore was not discovered before demolition began and the material cannot be safely removed. If not removed for safety reasons, these materials must be adequately wetted when exposed during demolition and maintained wet until they are disposed of in accordance with subsection 11.

(d) They are category II nonfriable asbestos-containing material and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.

(2) When a facility component that contains, is covered with, or is coated with regulated asbestos-containing material is being taken out of the facility as a unit or in sections:

(a) Adequately wet all regulated asbestos-containing material exposed during cutting or disjointing operations; and

(b) Carefully wrap or otherwise contain the facility member with an impermeable covering prior to the disjoining operation;

(c) Carefully lower the units or sections to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the regulated asbestos-containing material.

(3) When regulated asbestos-containing material is being stripped from a facility component while it remains in place in a facility, adequately wet the material during the stripping operation.

(a) In renovation operations, wetting that would unavoidably damage equipment or present a safety hazard is not required if:

[1] The owner or operator has obtained prior written approval from the department based on a written application that wetting to comply with this

paragraph would unavoidably damage equipment or present a safety hazard; and

[2] The owner or operator uses one of the following emission control methods:

[a] A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air and be equipped with high efficiency particulate air filtration or be designed and operated in accordance with the requirements in subsection 13.

[b] A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.

[c] Leaktight wrapping to contain all regulated asbestos-containing material prior to dismantlement.

(b) In renovation operations where wetting would result in equipment damage or a safety hazard and the methods allowed in subparagraph a of paragraph 3 of this subdivision cannot be used, another method may be used after obtaining written approval from the department based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph 3 of this subdivision.

(c) A copy of the department's written approval must be kept at the worksite and made available for inspection.

(4) After a facility component covered with, coated with, or containing regulated asbestos-containing material has been taken out of the facility as units or in sections pursuant to paragraph 2 of this subdivision it must be kept contained in leaktight wrapping or:

(a) Adequately wet the regulated asbestos-containing material during stripping; or

(b) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air and be equipped with high-efficiency particulate air filtration or be designed and operated in accordance with the requirements in subsection 13.

(5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs 2, 3, and 4 of this subdivision) the regulated asbestos-containing material is not required to be stripped if the following requirements are met:

(a) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the regulated asbestos-containing material;

(b) The component is encased in a leaktight wrapping; and

(c) The leaktight wrapping is labeled according to subsection 11 during all loading and unloading operations and during storage.

(6) For all regulated asbestos-containing material, including material that has been removed or stripped:

(a) Adequately wet the material and ensure that it remains wet until collected for disposal in accordance with subsection 11;

(b) Carefully lower the materials to the ground or a lower floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material; and

(c) Transport the materials to the ground via leaktight chutes or containers if they have been removed or stripped more than fifty feet [15.24 meters] above ground level and were not removed as units or in sections.

Regulated asbestos-containing material contained in leaktight wrapping that has been removed in accordance with paragraph 4 of this subdivision and subitem c of item 2 of subparagraph a of paragraph 3 of this subdivision need not be wetted.

(7) When the temperature at the point of wetting is below zero degrees Celsius [32 degrees Fahrenheit], the owner or operator:

(a) Need not comply with the wetting requirements of subparagraph a of paragraph 2 of subdivision c of subsection 4 and paragraph 3 of this subdivision. The owner or operator shall comply with the other requirements in this subdivision;

(b) Remove facility components containing, coated with or covered with friable asbestos materials as units or in sections to the maximum extent possible; and

(c) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records. These records must be available for inspection by the department during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least two years.

(8) No regulated asbestos-containing material may be stripped, removed, or otherwise handled or disturbed at a facility regulated by this subsection unless at least one onsite representative such as a supervisor, foreman or management level person, or other authorized representative who has completed the supervisor training requirements of subparagraph a of paragraph 2 and paragraph 4 of subdivision b of subsection 16 is present. Evidence that the required training has been completed shall be posted and made available for inspection by the department at the demolition or renovation site.

(9) For facilities described in paragraph 4 of subdivision a, adequately wet the portion of the facility that contains friable asbestos materials during the wrecking operation.

(10) If a facility is demolished by intentional burning, all regulated asbestos-containing material, including category I and category II nonfriable asbestos-containing material must be removed in accordance with this subsection before burning.

(11) When a demolition or renovation project that involves the disturbance of regulated asbestos-containing material is conducted in the ambient air, the owner or operator shall designate the boundaries of the work area by appropriate means.

7. **Standard for spraying.** The owner or operator of an operation in which asbestos-containing materials are spray-applied shall use only those materials that contain one percent asbestos or less for spray-on application.

8. **Standard for fabricating.**

   a. Applicability. This subsection applies to the following fabricating operations using commercial asbestos:

      (1) The fabrication of cement building products.

      (2) The fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles.

      (3) The fabrication of cement or silicate board for ventilation hoods; ovens; electrical panels; laboratory furniture; bulkheads, partitions, and ceilings for marine construction; and flow control devices for the molten metal industry.

   b. Standard. Each owner or operator of any of the fabricating operations to which this subsection applies shall:

      (1) Discharge no visible emissions to the outside air from any of the operations or from any building or structure in which they are conducted or from any other fugitive sources; or

      (2) Use the methods specified by subsection 13 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

      (3) Monitor each potential source of asbestos emissions from any part of the fabricating facility, including air-cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring must be by visual observation of at least fifteen seconds duration per source of emissions.

      (4) Inspect each air-cleaning device at least once each week for proper operation and for changes that signal the potential for malfunction, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air-cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the department, and revise as necessary, a written maintenance plan to include at a minimum, the following:

         (a) Maintenance schedule.

         (b) Recordkeeping plan.

      (5) Maintain records of the results of visible emission monitoring and air-cleaning device inspections using a suitable form which includes the following information:

         (a) Date and time of each inspection.

         (b) Presence or absence of visible emissions.

         (c) Condition of fabric filters, including the presence of any tears, holes, and abrasions.

         (d) Presence of dust deposits on clean side of fabric filters.

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

(f) Daily hours of operation for each air-cleaning device.

(6) Furnish upon request and make available at the affected facility during normal business hours, for inspection by the department, all records required under this section.

(7) Retain a copy of all monitoring and inspection records for at least two years.

(8) Submit quarterly a copy of the visible emission monitoring record to the department if visible emissions occurred during the report period. Quarterly reports must be postmarked by the thirtieth day following the end of the calendar quarter.

9. **Standard for insulating materials.** No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this subsection do not apply to spray-applied insulating materials regulated under subsection 7.

10. **Standard for waste disposal for asbestos mills.** Each owner or operator of any source covered under the provisions of subsection 3 shall:

a. Deposit all asbestos-containing waste material at department-approved waste disposal sites operated in accordance with the provisions of subsection 15.

b. Discharge no visible emissions to the outside air from the transfer of asbestos waste from control devices to the tailings conveyor, or use the methods specified by subsection 13 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air. Dispose of the asbestos waste from control devices in accordance with subdivision b of subsection 11 or subdivision c of this subsection.

c. Discharge no visible emissions to the outside air during the collection, processing, packaging, transporting, or deposition of any asbestos-containing waste material, or use one of the disposal methods as follows:

(1) Use a wetting agent as follows:

(a) Adequately mix all asbestos-containing waste material with a wetting agent recommended by the manufacturer of the agent to effectively wet dust and tailings, before depositing the material at a waste disposal site. Use the agent as recommended for the particular dust by the manufacturer of the agent.

(b) Discharge no visible emissions to the outside air from the wetting operation or use the methods specified by subsection 13 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(c) Wetting may be suspended when the ambient temperature at the waste disposal site is less than fifteen degrees Fahrenheit [-9.44 degrees Celsius] as determined by an appropriate measurement method with an accuracy of plus or minus two degrees Fahrenheit [1.11 degrees Celsius]. During periods when wetting operations are suspended, the temperature must be recorded at least at hourly intervals, and records must be retained for at least two years in a form suitable for inspection.

(2) Use an alternative emission control and treatment method that has received prior written approval by the department and administrator. To obtain approval for an alternative method, a written application must be submitted to the department and the administrator of the United States environmental protection agency demonstrating that the following criteria are met:

(a) The alternative method will control asbestos emissions equivalent to currently required methods.

(b) That the alternative method is suitable for the intended application.

(c) The alternative method will not violate other regulations.

(d) The alternative method will not result in increased water pollution, land pollution, or occupational hazards.

(3) When waste is transported by vehicle to a disposal site, all of the requirements of subdivision d of subsection 11 must be complied with.

11. **Standard for waste disposal for manufacturing, demolition, renovation, spraying, and fabricating operations.** Each owner or operator of any source covered under any of the provisions of subsection 5, 6, 7, or 8 shall comply with all the provisions of this subsection. Each owner or operator of any source covered by subsection 10 shall comply with subdivision d of this subsection.

a. Discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, transporting, or deposition of any asbestos-containing waste material generated by the source, or use one of the emission control and waste treatment methods as follows:

(1) Adequately wet asbestos-containing waste material as follows:

(a) Mix asbestos waste from control devices with water to form a slurry; adequately wet other asbestos-containing waste material;

(b) Discharge no visible emissions to the outside air from collection, mixing, and wetting operations, or use the methods specified by subsection 13 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air;

(c) After wetting, seal all asbestos-containing waste material in leaktight containers while wet. For materials that will not fit into containers without additional breaking, put materials into leaktight wrapping;

(d) Label the containers or wrapped materials specified above as follows:

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

Alternatively, use warning labels currently specified by occupational safety and health standards of the department of labor, occupational safety and health administration (OSHA) under title 29 Code of Federal Regulations 1910.1001 or title 29 Code of Federal Regulations 1926.1101(k)(8); and

(e) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.

(2) Process asbestos-containing waste material into nonfriable forms as follows:

(a) Form all asbestos-containing waste material into nonfriable pellets or other shapes.

(b) Discharge no visible emissions to the outside air from the collection and processing operations, including incineration, or use the methods specified by subsection 13 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(3) For facilities demolished where the regulated asbestos-containing material is not removed prior to demolition according to paragraph 4 of subdivision a and subparagraphs a, b, c, and d of paragraph 1 of subdivision c of subsection 6 adequately wet asbestos-containing waste material at all times during and after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leaktight containers or wrapping but may be transported by covered hauling and disposed of in bulk.

(4) Use an alternative disposal method that has received prior approval by the department and administrator of the United States environmental protection agency.

(5) As applied to demolition and renovation, the requirements of subdivision a of this subsection do not apply to category I or category II nonfriable asbestos-containing material waste that is not or will not become crumbled, pulverized, or reduced to powder.

b. Deposit all asbestos-containing waste material as soon as practical at:

(1) Department-approved waste disposal sites operated in accordance with the provisions of subsection 15.

(2) A United States environmental protection agency-approved site that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos free) material according to the provisions of subsection 17.

(3) The requirements of this subdivision do not apply to category I nonfriable asbestos-containing material that is not or will not become regulated asbestos-containing material.

c. All facilities used for the temporary storage of asbestos-containing waste material must be controlled and the material must be stored in leaktight containers.

(1) Post a warning sign at the entrances to the temporary storage facility with a label as follows:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY

Alternatively, use warning labels currently specified by occupational safety and health standards of the department of labor, occupational safety and health administration (OSHA) under title 29 Code of Federal Regulations 1910.1001 or title 29 Code of Federal Regulations 1926.58.

(2) Take necessary precautions to prevent or restrict access to the temporary storage facility.

(3) The temporary storage facility must be inspected at least once per week to ensure that good structural integrity of the storage facility is maintained and that the facility remains secure.

(4) The maximum length of time allowed for temporary storage of an asbestos-containing waste material may not exceed one hundred eighty days.

d. Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must:

(1) Be displayed in such a manner and location that a person can easily read the legend.

(2) Conform to the requirements for twenty-inch by fourteen-inch [50.8-centimeter by 35.56-centimeter] upright format signs specified in title 29 Code of Federal Regulations 1910.145(d)(4) and this paragraph.

(3) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

| Legend | Notation |
|---|---|
| DANGER | 2.5 cm [1 in.] Sans Serif, Gothic, or Block. |
| ASBESTOS DUST HAZARD | 2.5 cm [1 in.] Sans Serif, Gothic, or Block. |
| CANCER AND LUNG DISEASE HAZARD | 1.9 cm [3/4 in.] Sans Serif, Gothic, or Block. |
| Authorized Personnel Only | 14 Point Gothic. |

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

e. Prior to transportation of more than three square feet [0.28 square meters] or three linear feet [0.91 meters] of asbestos-containing waste material off the facility site:

(1) The owner or operator and the transporter shall ensure that a waste shipment record has been appropriately completed and signed by the generator, and accompanies the waste to the disposal site. The waste shipment record must include the following information:

(a) Name, address, and telephone number of the facility owner or operator where the asbestos-containing waste materials were generated.

(b) Location of the facility where asbestos-containing waste material was generated.

(c) The name and address of this department as being the responsible agency for administering the asbestos NESHAP program.

(d) Estimated quantity of asbestos-containing waste material in cubic yards.

(e) Name and physical site location of the waste disposal site where the asbestos-containing waste will be deposited.

(f) The name and telephone number of the disposal site operator.

(g) The date transported.

(h) The name, address, and telephone number of the transporters.

(i) A certification that the contents of this 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.

(2) Provide a copy of the waste shipment record to the disposal site owner or operator at the same time as the asbestos-containing waste material is delivered to the disposal site.

(3) For waste shipments where a copy of the waste shipment record signed by the owner or operator of the designated disposal site is not received by the waste generator within thirty-five days of the date the waste was accepted by the initial transporter, contact the transporter or the owner or operator, or both, of the designated disposal site to determine the status of the waste shipment.

(4) Report in writing to this department if a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site is not received by the waste generator within forty-five days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(a) A copy of the waste shipment record for which a confirmation of delivery was not received; and

(b) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the result of those efforts.

(5) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site for at least two years.

(6) A copy of the completed waste shipment record must be submitted to the department by the owner or operator of the facility no later than ten days after the owner or operator of the facility receives the completed waste shipment record from the landfill operator.

f. Furnish upon request, and make available for inspection by the department, all records required under this section.

g. If an acceptable disposal site, as determined by subsection 15, is located on the same property as the facility where asbestos-containing waste materials were generated, then the recordkeeping requirements of subdivision e of this subsection do not apply. The owner shall maintain records which include information on the quantity, location, and date of asbestos-containing waste disposal activities.

12. **Standard for inactive waste disposal sites for asbestos mills and manufacturing and fabricating operations.** Each owner or operator of any inactive waste disposal site that

received deposits of asbestos-containing waste material generated by sources covered under subsection 3, 5, 8, or 10, shall:

a. Comply with one of the following:

(1) Discharge no visible emissions to the outside air from an inactive waste disposal site subject to this subsection;

(2) Cover the asbestos-containing waste material with at least fifteen centimeters [6 inches] of compacted non-asbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material;

(3) In areas where vegetation would be difficult to maintain, cover the asbestos-containing waste material with at least sixty centimeters [2 feet] of compacted non-asbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste or cover with at least six inches [15.24 centimeters] of compacted non-asbestos-containing material and at least an additional three inches [7.62 centimeters] of a nonasbestos crushed rock cover in place of the vegetation; or

(4) For inactive waste disposal sites for asbestos tailings, apply a resinous-based or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions. Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent. Obtain prior approval of the department to use other equally effective dust suppression agents. For purposes of this paragraph, used, spent, or other wasteoil is not considered a dust suppression agent.

b. Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with paragraph 2 or 3 of subdivision a of this subsection.

(1) Display warning signs at all entrances and at intervals of three hundred twenty-eight feet [100 meters] or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:

(a) Be posted in such a manner and location that a person can easily read the legend.

(b) Conform to the requirements for fifty-one-centimeter by thirty-six-centimeter [20-inch by 14-inch] upright format signs specified in title 29 Code of Federal Regulations 1910.145(d)(4) and this subdivision.

(c) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

| Legend | Notation |
|---|---|
| DANGER | 2.5 cm [1 in.] Sans Serif, Gothic, or Block. |
| ASBESTOS DUST HAZARD | 2.5 cm [1 in.] Sans Serif, Gothic, or Block. |
| CANCER AND LUNG DISEASE HAZARD | 1.9 cm [3/4 in.] Sans Serif, Gothic, or Block. |
| Authorized Personnel Only | 14 Point Gothic. |

Spacing between any two lines must be at least equal to the height of the upper two lines.

(2) Fence the perimeter of the site in a manner adequate to deter access by the general public.

(3) Upon request and supply of appropriate information, the department will determine whether a fence or a natural barrier adequately deters access by the general public.

c. The owner or operator may use an alternative control method that has received prior approval of the department and administrator of the United States environmental protection agency rather than comply with the requirements of subdivision a or b of this subsection.

d. Notify the department, in writing, at least forty-five days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under this section and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of a new start date must be provided to the department at least ten days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the department may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

e. Within sixty days of a site becoming inactive, record in accordance with state law a notation on the deed to the facility property and on any instrument that would normally be examined during a title search. This notation will in perpetuity notify any potential purchaser of the property that:

(1) The land has been used for the disposal of asbestos-containing waste material;

(2) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in subdivision f of subsection 15 have been filed with the department; and

(3) The site is subject to this section.

13. **Air-cleaning.**

a. The owner or operator who elects to use air-cleaning, as permitted in subsections 3, 5, 6, 7, 8, 10, and 11 shall:

(1) Use fabric filter collection devices except as noted in subdivision b of this subsection, doing all of the following:

(a) Ensuring that the airflow permeability, as determined by A.S.T.M. method D737-75, does not exceed nine $m^3/min/m^2$ [30 $ft^3/min/ft^2$] for woven fabrics or eleven $m^3/min/m^2$ [35 $ft^3/min/ft^2$] for felted fabrics, except that twelve $m^3/min/m^2$

[40 $ft^3/min/ft^2$] for woven and fourteen $m^3/min/m^2$ [45 $ft^3/min/ft^2$] for felted fabrics is allowed for filtering air from asbestos ore dryers.

(b) Ensuring that felted fabric weighs at least four hundred seventy-five grams per square meter [14 ounces per square yard] and is at least one and six-tenths millimeters [1/16 inch] thick throughout.

(c) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.

(2) Properly install, use, operate, and maintain all air-cleaning equipment authorized by this subsection. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the asbestos material.

(3) For fabric filters installed after January 10, 1989, provide for easy inspection for faulty bags.

b. There are the following exceptions to paragraph 1 of subdivision a:

(1) If the use of fabric creates a fire or explosion hazard or the department determines that a fabric filter is not feasible, the department may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals [40 inches water gauge pressure].

(2) Use a high-efficiency particulate air filter that is certified to be at least ninety-nine and ninety-seven hundredths percent efficient for particles with a diameter size of three-tenths microns and greater.

(3) The department and administrator of the United States environmental protection agency may authorize the use of filtering equipment other than that described in subdivisions a and b of this subsection if the owner or operator demonstrates to the administrator and the department's satisfaction that it is equivalent to the described equipment in filtering asbestos material.

14. **Reporting.**

a. Any existing source to which this section applies (with the exception of sources subject to subsections 4, 6, 7, and 9) which has not previously supplied a notice to this department or the administrator, shall provide such notice within ninety days of the effective date of this regulation. Any new source to which this section applies shall provide notice to this department within ninety days of the effective startup date of the source. Changes to the information provided in a notice must be submitted to this department within thirty days of the change taking place. The notice shall provide the following information to the department:

(1) A description of the emission control equipment used for each process.

(2) If a fabric filter device is used to control emissions:

(a) The airflow permeability in $m^3/min/m^2$ if the fabric filter device uses a woven fabric and, if the fabric is synthetic, whether the fill yarn is spun or not spun.

(b) If the fabric filter device uses a felted fabric, the density in $g/m^2$, the minimum thickness in millimeters, and the airflow permeability in $m^3/min/m^2$.

(3) If a high-efficiency particulate air filter is used to control emissions, the certified efficiency.

(4) For sources subject to subsections 10 and 11:

(a) A brief description of each process that generates asbestos-containing waste material;

(b) The average volume of asbestos-containing waste material disposed of in cubic yards per day;

(c) The emission control methods used in all stages of waste disposal; and

(d) The type of disposal site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.

(5) For sources subject to subsections 12 and 15:

(a) A brief description of the site; and

(b) The method or methods used to comply with the standard, or alternative procedures to be used.

b. The information required by subdivision a of this subsection must accompany the information required by 40 Code of Federal Regulations 61.10. Active waste disposal sites subject to subsection 15 shall also comply with this provision. Roadways, demolition and renovations, spraying, and insulating materials are exempted from the requirements of 40 Code of Federal Regulations 61.10(a).

15. **Standard for active waste disposal sites.** To be an acceptable site for disposal of asbestos-containing waste material under subsections 10, 11, and 17, an active waste disposal site must meet the requirements of this subsection.

a. Either there shall be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of subdivisions c and d of this subsection must be met.

b. Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph 1 of subdivision c of this subsection must be met.

(1) Warning signs must be displayed at all entrances and at intervals of three hundred twenty-eight feet [100 meters] or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

(a) Be posted in such a manner and location that a person may easily read the legend.

(b) Conform to the requirements of fifty-one centimeters by thirty-six centimeters [20 inches by 14 inches] upright format signs specified in title 29 Code of Federal Regulations 1910.145(d)(4), and this subsection.

(c) Display the following legend in the lower panel, with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

| Legend | Notation |
|---|---|

| | |
|---|---|
| Asbestos Waste Disposal Site | 2.5 cm [1 in.] Sans Serif, Gothic, or Block. |
| Avoid Creating Dust | 1.9 cm [3/4 in.] Sans Serif, Gothic, or Block. |
| Breathing Asbestos Dust May Cause Lung Disease and Cancer | 14 Point Gothic. |

Spacing between lines must be at least equal to the height of the upper two lines.

(2) The perimeter of the disposal site must be fenced in order to adequately deter access by the general public.

(3) Upon request and supply of appropriate information, the department will determine whether a fence or a natural barrier adequately deters access by the general public.

c. Rather than meet the no visible emission requirements of subdivision a of this subsection, an active waste disposal site would be an acceptable site if at the end of each operating day, or at least once every twenty-four-hour period while the site is in continuous operation, the asbestos-containing waste material which was deposited at the site during the operating day or previous twenty-four-hour period is covered with either:

(1) At least fifteen centimeters [6 inches] of compacted non-asbestos-containing material; or

(2) A resinous-based or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. This agent must be used in the manner and frequency recommended for the particular dust by the manufacturer of the dust suppression agent. Other equally effective dust suppression agents may be used upon prior approval by the department. For purposes of this paragraph, used, spent, or other wasteoil is not considered a dust suppression agent.

d. Rather than meet the no visible emission requirements of subdivision a of this subsection, use an alternative emission control method that has received prior approval by the department and administrator of the United States environmental protection agency.

e. For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

(1) Maintain waste shipment records which include the following information:

(a) The name, address, and telephone number of the waste generator.

(b) The name, address, and telephone number of the transporters.

(c) The quantity of the asbestos-containing material in cubic yards.

(d) The presence of improperly enclosed or uncovered wastes or any asbestos-containing waste material not sealed in leaktight containers. Report in writing to this department by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(e) The date of the receipt.

(2) As soon as possible and no longer than thirty days after receipt of the waste send a copy of the signed waste shipment record to the waste generator.

(3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within fifteen days after receiving the waste, immediately report in writing to this department. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(4) Retain a copy of all records and reports required by this subdivision for at least two years.

f. Maintain until closure, records of the location, depth and area, and quantity in cubic yards of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

g. Upon closure, comply with all the provisions of subsection 12.

h. Submit to this department, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

i. Furnish upon request and make available during normal business for inspection by this department, all records required under this section.

j. Comply with subdivision d of subsection 12 if it becomes necessary to excavate or otherwise disturb asbestos-containing waste material that has been previously covered.

16. **Asbestos abatement licensing and certification.** No public employees or employees of asbestos contractors shall engage in any asbestos abatement activity or provide asbestos abatement project monitoring unless they are certified with the department as provided in this subsection. No person shall engage in any asbestos abatement activity in a public or commercial building unless the person is certified with the department as provided in this subsection. Certification will be for a period of one year from the completion date of the initial training course or the last refresher course in the appropriate discipline. All asbestos contractors and firms who provide asbestos abatement or asbestos abatement project monitoring services, must be licensed with this department, as provided in this subsection, prior to beginning asbestos abatement or asbestos abatement project monitoring activities. At least one person having completed the requirements for supervisor certification of subdivision b of this subsection is required to be at the worksite at all times while work is in progress, if the work involves repair, removal, encapsulation, enclosure, or handling of regulated asbestos-containing material if the work is being conducted by an asbestos contractor or public employees. At least one onsite individual having completed the supervisor training requirement of subdivision b of this subsection is required to be present if the activity is regulated by subsection 6 and the work is being conducted by employees of the owner.

a. Asbestos workers. All asbestos workers employed by asbestos abatement contractors and all public employees and all other asbestos workers in public and commercial buildings engaged in the repair, removal, enclosure, encapsulation, or handling of regulated asbestos-containing material, must obtain certification as outlined in all paragraphs of this subdivision except as provided in subdivision h.

(1) Application. Any applicant desiring certification as an asbestos worker shall make an application to the department on forms supplied by the department. Each application shall be accompanied by a nonrefundable fee of fifty dollars except as

provided in subdivision g. This fee includes the processing of the initial examination specified in paragraph 3 of this subdivision.

(2) Initial training. Any applicant desiring certification as an asbestos worker shall complete the initial training requirements for asbestos worker accreditation under title 40 Code of Federal Regulations part 763, appendix C to subpart E - environmental protection agency model contractor accreditation plan as amended February 3, 1994, by attending and successfully completing a training course designed for asbestos workers. The training course must have received approval from the environmental protection agency or the department.

(3) Examination. Any applicant for certification shall pass a written examination administered by the department. The department may accept proof of successful completion of an examination administered by an environmental protection agency- or department-approved training course provider. The examination and the results of the examination must be available to the department upon request. Any applicant who fails to obtain a minimum seventy percent passing score on the examination shall be eligible to take a subsequent examination no earlier than one week following the previous examination. A twenty-five dollar fee is required for each examination. No more than three examinations may be given before requiring attendance of another initial training course. Information concerning the testing arrangements can be obtained from the department.

(4) Refresher training. Any asbestos worker who has received initial training and has established full certification with the department, and who wishes to maintain continuous certification, shall complete a refresher training course as required by the model contractor accreditation plan as amended February 3, 1994, within one year of completing the initial training course. The course content must include a review of the changes in federal and state regulations, a discussion of the developments in state-of-the-art procedures and equipment as well as an overview of key aspects of the initial training course. Thereafter, the asbestos worker shall complete a refresher course within one year of the last refresher course.

(5) Certification renewal. Any asbestos worker who desires to renew their certification must have attended a refresher training course within twelve months prior to submittal of the renewal application. The renewal application shall include proof of attendance at such course and a recertification fee of fifty dollars. Certification is current for a period of twelve months from the date of the training course. If an asbestos worker does not satisfy the refresher training requirements of this subdivision within two years of the date of the initial training course or of the last refresher training course, then the individual shall complete the initial training requirements provided in paragraph 2 of this subdivision to reestablish full certification.

(6) The certification card issued by the department must be available at the worksite for each asbestos worker.

b. Other asbestos disciplines. Any individual, except asbestos workers, acting as or acting on behalf of an asbestos contractor or as a public employee who performs an asbestos abatement service or any individual who performs asbestos abatement project monitoring on behalf of a contracting firm or as a public employee or any other individual who performs asbestos abatement in a public or commercial building must obtain certification as outlined in all paragraphs of this subdivision. This certification requirement applies to asbestos abatement supervisors, asbestos inspectors, asbestos management

planners, asbestos abatement project designers, and asbestos abatement project monitors except as provided in subdivision h.

(1) Application. Any person desiring certification in the disciplines of asbestos inspector, asbestos management planner, asbestos abatement project designer, asbestos abatement project monitor, and asbestos abatement supervisor shall make an application to the department on forms supplied by the department. Each application shall be accompanied by a nonrefundable fee of fifty dollars for each discipline within which the applicant is seeking certification except as provided in subdivision g. This fee includes the processing of the initial examination specified in paragraph 3 of this subdivision.

(2) The initial training requirements are as follows:

(a) Any applicant desiring certification as an asbestos inspector, asbestos management planner, asbestos abatement project designer, or asbestos abatement supervisor or any individual required to meet the training requirements of paragraph 8 of subdivision c of subsection 6 shall complete the initial training requirements set forth in title 40 Code of Federal Regulations part 763, appendix C to subpart E - environmental protection agency model contractor accreditation plan as amended February 3, 1994, by attending and successfully completing a training course in the appropriate discipline. The training course must have received approval in the respective discipline from the environmental protection agency or the department.

(b) Asbestos abatement project monitors must have a valid state certification as asbestos abatement supervisor or asbestos abatement project designer and shall have completed a NIOSH 582 or equivalent air sampling course of not less than four days in length.

(3) Examination. Any applicant for certification in a specific discipline except asbestos abatement project monitor shall pass a written examination administered by the department for that discipline. The department may accept proof of successful completion of an examination administered by an environmental protection agency or department approved training course provider. The examination and the results of the examination must be available to the department upon request. Any applicant who fails to obtain a minimum seventy percent passing score on the examination shall be eligible to take a subsequent examination no earlier than one week following the previous examination. A twenty-five dollar fee is required for each examination. No more than three examinations shall be given before requiring attendance of another initial training course.

(4) Refresher training. Any asbestos abatement supervisor, asbestos inspector, asbestos management planner, or asbestos abatement project designer who has received initial training and has established full certification with the department, and who wishes to maintain continuous certification, or any individual who must meet the training requirements of paragraph 8 of subdivision c of subsection 6 shall complete a refresher training course as required by the model contractor accreditation plan as amended February 3, 1994, within one year of completing the initial training course. The course content must include a review of the changes in the federal and state regulations, a discussion of the developments in state-of-the-art procedures and equipment as well as an overview of key aspects of the initial training course. Thereafter, these persons shall complete a refresher course designed for the respective disciplines within one year of the last refresher course.

(5) Certification renewal. Any asbestos abatement supervisor, asbestos inspector, asbestos management planner, asbestos abatement project designer, or asbestos abatement project monitor who desires to renew the person's certification must have attended a refresher training course in the appropriate discipline within twelve months prior to submittal of the renewal application. The renewal application shall include proof of attendance at such a course and a recertification fee of fifty dollars per discipline. Certification is current for a period of twelve months from the date of the training course. If an individual does not satisfy the refresher training requirements of this subdivision in their respective discipline within two years of the date of the initial training or of the last refresher training, then that individual shall complete the initial training requirements provided in paragraph 2 of this subdivision to reestablish full certification. Refresher training of the air sampling course for project monitors is not required.

(6) The certification card issued by the department must be available at the worksite.

c. Asbestos contractor license. Each contractor who performs asbestos abatement services or performs asbestos abatement project monitoring services in the state shall obtain an asbestos contractor license except as provided in subdivision h.

(1) Submit an application to the department on forms supplied by the department. An application shall be accompanied by a nonrefundable fee of one hundred fifty dollars.

(2) The license fee will cover the period from January first through December thirty-first of each year unless the license is suspended, revoked, or denied as specified in subdivision f. The fee shall be one hundred fifty dollars regardless of the application date. Following the initial submittal, the renewal fee shall be due and payable by January thirtieth of the following year.

(3) A contractor seeking an asbestos contractor license must have completed the appropriate training and certification requirements in subdivision b of this subsection. The contractor may designate an employee who has completed this requirement to serve as the contractor's agent for the purposes of obtaining an asbestos contractor license.

(4) Asbestos contractors who provide multiple services are not required to pay additional license fees.

(5) All certifiable services offered by an asbestos contractor must be performed by persons certified in accordance with subdivisions a and b of this subsection.

(6) A copy of the asbestos contractor license shall be made available at the worksite.

(7) This license does not exempt, supersede, or replace any other state or local licensing or permitting requirements.

d. Approved initial and refresher training courses. The department will maintain and provide a listing of approved initial and refresher training courses. Applicants seeking approval of courses, other than those present on the department list, must submit information on the course content to the department. The course content must satisfy the minimum requirements of the model contractor accreditation plan as amended February 3, 1994. The department will advise the applicant whether the course is approved within thirty days of receipt of the necessary information. Training course providers will be required to meet all applicable requirements contained in title 40 Code of Federal Regulations part 763, appendix C to subpart E as amended February 3, 1994.

e. Reciprocity. Each applicant for asbestos worker or asbestos contractor certification who is licensed or certified for asbestos abatement in another state may petition the department for certification without written examination. The department shall evaluate the requirements in such other states and shall issue the certification without examination if the department determines that the requirements in such other states are at least as stringent as the requirements for certification in North Dakota. Each application for certification pursuant to this subdivision shall submit an application accompanied by a nonrefundable fee of fifty dollars.

f. Suspension, revocation, or denial. An asbestos certification or license may be suspended, revoked, or denied if:

(1) Violations of the requirements of this section are noted;

(2) Another state has revoked, suspended, or denied a license or certification for violations of applicable standards;

(3) An incomplete application is filed; or

(4) The required fee is not submitted.

g. Public employees will not be required to pay the fifty dollar certification or recertification fees.

h. Any individual or asbestos contractor engaged in repair, removal, enclosure, or encapsulation activities involving less than or equal to three square feet [0.28 square meters] or three linear feet [0.91 meters] of asbestos-containing materials, are exempt from the certification and licensing requirements of this subsection.

i. Upon written request, the department, at its discretion, may review training course material and conduct an audit of a training course to determine if the course and examination meet the training requirements of title 40 Code of Federal Regulations part 763, appendix C to subpart E - environmental protection agency model contractor accreditation plan as amended February 3, 1994. Under the authority granted to this department by the environmental protection agency courses that this department determine to meet the model contractor accreditation plan shall be listed in the federal register list of approved courses.

(1) Training courses seeking department approval shall submit the material necessary for the department to conduct the review, including the submittal requirements listed in title 40 Code of Federal Regulations part 763, appendix C, subpart E, model contractor accreditation plan as amended February 3, 1994.

(2) The department must be provided access, without cost, to any asbestos course conducted in this state to determine if the course meets the requirement of the environmental protection agency model contractor accreditation plan as amended February 3, 1994. Following such an audit, the department may rescind approval or refuse to accept as adequate any course determined not to meet the training requirements of the environmental protection agency model contractor accreditation plan.

(3) Any training provider requesting a review of the provider's course for approval by this department shall submit a filing fee of one hundred fifty dollars plus an application processing fee. The application processing fee will be based on the actual processing costs, including time spent by this department to conduct the course review and course audit, and any travel and lodging expenses the department incurs conducting these items. Following the course review and audit,

and after making a determination on the accreditation status of the course, a statement will be sent to the applicant listing the remaining application processing costs. The statement must be sent within fifteen months of the submittal of the initial filing fee.

17. **Standard for operations that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.** Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall:

    a. Obtain the prior written approval of this department and the administrator of the United States environmental protection agency to construct the facility. To obtain approval, the owner or operator shall provide the department and the administrator of the United States environmental protection agency with the following information:

        (1) Application to construct pursuant to chapter 33.1-15-14.

        (2) In addition to the information requirements of chapter 33.1-15-14, provide a:

            (a) Description of the waste feed handling and temporary storage.

            (b) Description of process operating conditions.

            (c) Description of the handling and temporary storage of the end products.

            (d) Description of the protocol to be followed when analyzing output materials by transmission electron microscopy.

        (3) Performance test protocol, including provisions for obtaining information required under subdivision b of this subsection.

        (4) The department may require that a demonstration of the process be performed prior to approval of the application to construct.

    b. Conduct a startup performance test. Test results must include:

        (1) A detailed description of the types and quantities of nonasbestos material, regulated asbestos-containing material, and asbestos-containing waste material processed (e.g., asbestos cement products, friable asbestos insulation, plaster, wood, plastic, wire, etc.). Test feed is to include the full range of materials that will be encountered in actual operation of the process.

        (2) Results of analyses, using polarized light microscopy, that document the asbestos content of the wastes processed.

        (3) Results of analyses using transmission electron microscopy, that document that the output materials are free of asbestos. Samples for analysis are to be collected as eight-hour composite samples (one 200-gram [seven-ounce] sample per hour), beginning with the initial introduction of regulated asbestos-containing material or asbestos-containing waste material and continuing until the end of the performance test.

        (4) A description of operating parameters, such as temperature and residence times, defining the full range over which the process is expected to operate to produce nonasbestos (asbestos-free) materials. Specify the limits for each operating parameter within which the process will produce nonasbestos (asbestos-free) materials.

(5) The length of the test.

c. During the initial ninety days of operation:

(1) Continuously monitor and log the operating parameters identified during startup performance tests that are intended to ensure the production of nonasbestos (asbestos-free) output material.

(2) Monitor input materials to ensure that they are consistent with the test feed materials described during startup performance tests in paragraph 1 of this subdivision.

(3) Collect and analyze samples taken as ten-day composite samples (one 200-gram [seven-ounce] sample collected every eight hours of operation) of all output materials for the presence of asbestos. Composite samples may be for fewer than ten days. Transmission electron microscopy must be used to analyze the output materials for the presence of asbestos. During the initial ninety-day period, all output materials must be stored onsite until analysis shows the material to be asbestos-free or be disposed of as asbestos-containing waste material according to subsection 11.

d. After the initial ninety days of operation:

(1) Continuously monitor and record the operating parameters identified during startup performance testing and any subsequent performance testing. Any output produced during a period of deviation from the range of operating conditions established to ensure the production of nonasbestos (asbestos-free) output material shall be:

(a) Disposed of as asbestos-containing waste material according to subsection 11;

(b) Recycled as waste feed during process operations within the established range of operating conditions; or

(c) Stored temporarily onsite in a leaktight container until analyzed for asbestos content. Any product material that is not asbestos-free shall either be disposed of as asbestos-containing waste material or recycled as waste feed to the process.

(2) Collect and analyze monthly composite samples (one 200-gram [seven-ounce] sample collected every eight hours of operation) of the output material. Transmission electron microscopy must be used to analyze the output material for the presence of asbestos.

e. Discharge no visible emissions to the outside air from any part of the operation or use the methods specified by subsection 13 to clean emissions containing particulate asbestos material before they escape to or are vented to the outside air.

f. Maintain records onsite and include the following information:

(1) Results of startup performance testing and all subsequent performance testing, including operating parameters, feed characteristics, and analyses of output materials.

(2) Results of the composite analysis required during the initial ninety days of operation under subdivision c of this subsection.

(3) Results of the monthly composite analysis required under subdivision d of this subsection.

(4) Results of continuous monitoring and logs of process operating parameters required under subdivisions c and d of this subsection.

(5) Information on waste shipments received as required in subdivision e of subsection 15.

(6) For output materials when no analyses were performed to determine the presence of asbestos, record the name and location of the purchaser or disposal site to which output materials were sold or deposited and the date of sale or disposal.

(7) Retain records required by this subdivision for at least two years.

g. Submit the following reports to the department:

(1) A report for each analysis of product composite samples performed during the initial ninety days of operation.

(2) A quarterly report, including the following information concerning activities during each consecutive three-month period:

(a) Results of analyses of monthly product composite samples.

(b) A description of any deviation from the operating parameters established during performance testing, the duration of the deviation, and steps taken to correct the deviation.

(c) Disposition of any product produced during a period of deviation, including whether it was recycled, disposed of as asbestos-containing waste material, or stored temporarily onsite until analyzed for asbestos content.

(d) The information on waste disposal activities as required in subdivision f of subsection 15.

h. Nonasbestos (asbestos-free) output material is not subject to any of the provisions of this section. Output material in which asbestos is detected, or output materials produced when the operating parameters deviated from those established during the startup performance testing, unless shown by transmission electron microscopy analysis to be asbestos-free shall be considered to be asbestos-containing waste and must be handled and disposed of in accordance with subsections 11 and 15 or reprocessed while all of the established operating parameters are being met.

**History:** Effective January 1, 2019.
**General Authority:** NDCC 23.1-06-04, 23.1-25-05; S.L. 2017, ch. 199, § 1
**Law Implemented:** NDCC 23.1-06-04, 23.1-25-05; S.L. 2017, ch. 199, § 21