

**Standard for operations that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.**

- (A) Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall obtain from the director a permit-to-install and operate pursuant to Chapter 3745-31 of the Administrative Code; or, a permit-to-install pursuant to Chapter 3745-31 of the Administrative Code and a permit-to-operate pursuant to Chapter 3745-77 of the Administrative Code, as applicable.
- (1) To obtain a permit-to-install or a permit-to-install and operate, the owner or operator shall submit a completed application in accordance with Chapter 3745-31 of the Administrative Code, and provide the director with the following information:
- (a) Description of waste feed handling and temporary storage.
  - (b) Description of process operating conditions.
  - (c) Description of the handling and temporary storage of the end product.
  - (d) Description of the protocol to be followed when analyzing output materials by transmission electron microscopy.
  - (e) Performance test protocol, including provisions for obtaining information required under paragraph (A)(2) of this rule.
  - (f) The director may require that a demonstration of the process be performed prior to issuing the permit to install.
- (2) Prior to being issued a permit-to-install and operate pursuant to Chapter 3745-31 of the Administrative Code or a permit-to-operate pursuant to Chapter 3745-77 of the Administrative Code, the owner or operator shall conduct a start-up performance test. Test results shall include:
- (a) A detailed description of the types and quantities of nonasbestos material, regulated asbestos-containing material, and asbestos-containing waste material processed, including but not limited to 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.
  - (b) Results of analyses, using polarized light microscopy, that document the asbestos content of the wastes processed.

- (c) 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 two hundred 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.
  - (d) A description of operating parameters, such as temperature and residence time, 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.
  - (e) The length of the test.
- (B) During the initial ninety days of operation, each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material, shall:
- (1) Continuously monitor and log the operating parameters identified during start-up 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 start-up performance tests in paragraph (A)(2)(a) of this rule.
  - (3) Collect and analyze samples, taken as ten-day composite samples (one two hundred gram (seven ounce) sample collected every eight hours of operation) of all output material for the presence of asbestos. Composite samples may be for fewer than ten days. Transmission electron microscopy (TEM) shall be used to analyze the output material for the presence of asbestos. During the initial ninety-day period, all output materials must be stored on-site until analysis shows the material to be asbestos-free or disposed of as asbestos-containing waste material in accordance with rule 3745-20-05 of the Administrative Code.
- (C) After the initial ninety days of operation each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall:
- (1) Continuously monitor and record the operating parameters identified during start-up performance testing and any subsequent performance testing.
  - (2) Continuously monitor any output produced during a period of deviation from the range of operating conditions established to ensure the production of nonasbestos (asbestos-free) material.

(3) Output materials shall be:

- (a) Disposed of as asbestos-containing waste material according to rule 3745-20-05 of the Administrative Code, or
- (b) Recycled as waste feed during process operation within the established range of operating conditions, or
- (c) Stored temporarily on-site in a leak-tight container until analyzed for asbestos content. Any product material that is not asbestos-free shall be either disposed of as asbestos-containing waste material or recycled as waste feed to the process.

(4) Collect and analyze monthly composite samples (one two hundred gram (seven ounce) sample collected every eight hours of operation) of the output material. Transmission electron microscopy shall be used to analyze the output material for the presence of asbestos.

(D) Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall discharge no visible emissions to the outside air from any part of the operation, or use the methods specified by rule 3745-20-12 of the Administrative Code to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(E) Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall maintain records on-site and include the following information:

- (1) Results of start-up performance testing and all subsequent performance testing, including operating parameters, feed characteristic, and analyses of output materials;
- (2) Results of the composite analyses required during the initial ninety days of operation under paragraph (B) of this rule;
- (3) Results of the monthly composite analyses required under paragraph (C) of this rule;
- (4) Results of continuous monitoring and logs of process operating parameters required under paragraphs (B) and (C) of this rule;
- (5) The information on waste shipments received as required in paragraph (B) of rule 3745-20-06 of the Administrative Code;

- (6) For output materials where no analyses were performed to determine the presence of asbestos, record the name and location of the purchaser or disposal site to which the output materials were sold or deposited, and the date of sale or disposal;
  - (7) Retain records required by this rule for at least two years.
- (F) Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall submit the following reports to the director:
- (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 on-site until analyzed for asbestos content;
    - (d) The information on waste disposal activities as required in paragraph (B)(2) of rule 3745-20-06 of the Administrative Code.
- (G) Output material, found to be asbestos free according to paragraph (C)(3) of this rule, is not subject to any of the provisions of this chapter. Output materials in which asbestos is detected, or output materials produced when the operating parameters deviated from those established during the start-up performance testing, unless shown by transmission electron microscopy analysis to be asbestos-free, shall be considered to be asbestos-containing waste and shall be handled and disposed of according to rules 3745-20-05 and 3745-20-06 of the Administrative Code or reprocessed while all of the established operating parameters are being met.

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