

15A NCAC 2D .1111 “MAXIMUM ACHIEVEABLE CONTROL TECHNOLOGY” - Area Source Standards for Prepared Feeds Manufacturing (MACT 7D) - The Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111, as promulgated in 40 CFR 63, Subpart DDDDDDD (7D), “National Emission Standards for Hazardous Air Pollutants Area Source Standards for Prepared Feeds Manufacturing”, including Subpart A "General Provisions."

- a. 40 CFR 63.11620 – Compliance Dates for Existing and New Sources
  - i. A prepared feeds manufacturing affected source is existing if you commenced construction or reconstruction of the facility on or before July 27, 2009.
  - ii. A prepared feeds manufacturing affected source is new if you commenced construction or reconstruction of the facility after July 27, 2009.
  - iii. Existing sources have a compliance date of January 5, 2012.
  - iv. The compliance date for new sources is upon start-up.
- b. Operations Standards - As required by 15A NCAC 2D .1111 and 40 CFR 63, Subpart DDDDDDD (7D), the following operational standards are applicable to prepared feed manufacturing facilities that use a material containing chromium (Cr) in amounts greater than 0.1 % by weight, or a material containing manganese (Mn) in amounts greater than 1.0 % by weight and are Area Sources of HAPs. *NOTE: the pre-mix or supplement or concentrate ingredients stand alone for comparison to the Cr > 0.1 % by weight or Mn > 1.0 % by weight issue; not the actual ingredient % into the overall animal feed production.*

The affected source is the collection of all equipment and activities necessary to produce animal feed from the point in the process where a material containing Cr or Mn is added, to the point where the finished animal feed product leaves the facility.

40 CFR 63.11621 - Standards for New and Existing Facilities

- i. Management Practices – In all areas of the affected source where materials containing Cr or Mn are stored, used, or handled, you must comply with the following management practices:
  - A. You must perform housekeeping measures to minimize excess dust. These measures must include, but not be limited to:
    - I. You must use either an industrial vacuum system or manual sweeping to reduce the amount of dust;
    - II. At least once per month, you must remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area;
    - III. You must keep doors shut except during normal ingress and egress.
  - B. You must maintain and operate all process equipment in accordance with manufacturer’s specifications and in a manner to minimize dust creation.
- ii. Any Cr or Mn raw materials must be stored in closed containers.

- iii. Mixers must be covered during operation (except when materials are being added) and shall be operated so as to minimize dust. Materials containing Cr or Mn must be added in a manner that minimizes emissions.
  - iv. A device must be installed and operated at the loadout end of each bulk loader to reduce the distance between the loading arm and the truck or railcar (i.e., loadout chutes/socks/flex hose).
  - v. For pelleting operations with an average daily feed production level exceeding 50 tons per day, you must capture emissions and route them to a cyclone designed to reduce emissions of particulate matter (PM, not PM-10) by 95 percent or greater. “Average Daily Feed Production Level” is defined as the average amount of animal feed products produced each day over an annual period. The initial determination of the average daily feed production level is based on the one-year period prior to the compliance date for existing sources, or the design rate for new sources. *For existing sources, the initial average daily feed production level is based on the amount of feed product produced between May 4, 2011 and May 4, 2012, divided by the number of operating days during that period. For new sources, the initial average feed daily production level is based on the design production rate.* The subsequent average daily feed production levels are determined annually and are based on the amount of animal feed products produced in a calendar year divided by the number of days in which the production processes were in operation. You must also comply with the three requirements below (A, B, and C):
    - A. You must demonstrate that the cyclone is designed to reduce emissions PM by 95 percent or greater using one of the three methods below.
      - I. Manufacturer’s Specifications,
      - II. Certification by a Professional Engineer or a Responsible Official, or
      - III. Method 5 performance test for PM.
    - B. You must establish an inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone in accordance with paragraph (b)(v)(A) above. (See 40 CFR 63.11621(e)(2))
    - C. You must maintain and operate the cyclone in accordance with manufacturer’s specifications. If manufacturer’s specifications are not available, you must develop and follow standard maintenance and operating procedures that ensure proper operation of the cyclone.
- c. 40 CFR 63.11622 - Monitoring Requirements for New and Existing Sources
- i. The Permittee shall conduct quarterly inspections of each cyclone for corrosion, erosion, or any other damage that could result in air in-leakage, and record results of any maintenance or repairs in a logbook to be maintained on site.
  - ii. When the pelleting process is in operation, the Permittee shall monitor the inlet flow rate, inlet velocity, pressure drop, or fan amperage at least once per day, and record the results of this monitoring in a logbook to be maintained on site.
  - iii. The monthly housekeeping requirement (dusting and sweeping/vacuuming) shall be tracked and dated in a logbook to be maintained on site at all times.
  - iv. Inspect the device required at the loadout end of a bulk loader monthly and record results of any maintenance or repairs in a logbook to be maintained on site.

- d. 40 CFR 63.11623 - Testing Requirements
  - i. If a performance test is utilized to demonstrate compliance with the required 95 percent or greater reduction in particulate matter emissions on a cyclone for PM mass emission rate, Method 5 shall be used.
- e. 40 CFR 63.11624 – Notifications, Reporting, and Recordkeeping
  - i. Initial Notification date for Existing Sources was May 5, 2010. For New Sources, the Initial Notification is due no later than 120 days after you become subject to this Subpart. The initial notification shall include:
    - A. Name, address, phone number, and email address of the owner or operator.
    - B. Address (physical address) of the affected source.
    - C. An identification of the relevant standard (i.e., 7D).
    - D. A brief description of the operation.
    - E. Per 63.11624(c)(1), one copy of all Notifications shall be kept on site.
  - ii. Notification of Compliance Status (NOCS) – report is required as follows:
    - A. The NOCS for existing sources is due to NC DAQ on or before May 4, 2012.
    - B. The NOCS for new sources is due within 120 days after initial start-up or by October 18, 2010, whichever is later.
    - C. The NOCS must include:
      - I. Company name and address.
      - II. A statement by a responsible official with that official’s name, title, phone number, email address, and signature certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all relevant standards and requirements.
      - III. For cyclones, the range of acceptable parametric readings for each cyclone (inlet flow rate, inlet velocity, pressure drop, or fan amperage).
      - IV. If daily production is less than 50 tons per day (meaning cyclones are not applicable), the source must:
        - a. keep production records on site.
        - b. submit an Initial Average Daily Feed Production Level in the Notification of Compliance Status/ACC report and keep on site.
  - iii. NOCS for New Sources After the Compliance Date – If you own or operate a source that becomes an affected source after the applicable compliance date of January 5, 2012 for existing sources, or if you begin operating a newly affected source, you must submit a Notification of Compliance Status within 120 days of the date that you commence using materials containing Cr or Mn. This NOCS must contain the information in paragraph e. (ii)(C)(I) – (ii)(C)(IV) above.
  - iv. Annual Compliance Certification – An annual compliance certification report shall be *prepared* each year by March 1 for the previous year containing the information specified in A. – F. below. You must *submit* the report to NC DAQ if you had any instances of paragraph C. or D. in that year. Keep one copy on site at all times.
    - A. Company name and address.
    - B. A statement by a responsible official with that official’s name, title, phone number, email address, and signature certifying the truth, accuracy, and

completeness of the notification and a statement of whether the source has complied with all relevant standards and requirements.

- C. If the source is not in compliance, include a description of deviations from the applicable requirements, the time periods during which the deviations occurred, and the corrective actions taken.
  - D. Identification of all instances when the daily inlet flow rate, inlet velocity, pressure drop, or fan amperage was outside the range that constitutes proper operation of the cyclone(s). In these instances, include the time periods when this occurred and the corrective actions taken.
  - E. If this facility is not required to install and operate cyclones on the pelleting operation due to average daily feed production of 50 tpd or less, a notification is required if the average daily feed production level for the previous year exceeded 50 tpd. If this occurs, a cyclone must be installed and made operational by July 1 of the following year.
  - F. If this facility is required to install and operate cyclones on the pelleting operation due to average daily feed production being greater than 50 tpd, a notification is required if the average daily feed production level for the previous year was 50 tpd or less and the facility is no longer required to comply with the cyclone requirements.
- f. 40 CFR 63.11624(c) – Records. You must maintain the following records on site:
- i. Records of all monthly and quarterly inspections and any corrective actions required by this Subpart must be maintained on site.
  - ii. One copy of the Initial Notification and the NOCS on site at all times.
  - iii. One copy of the Annual Compliance Certification on site at all times.
  - iv. For each device used at the loadout end of a bulk loader (i.e., chutes/socks/ flex hose), you must keep records including the following information:
    - A. date, place, and time of each inspection.
    - B. person performing the inspection.
    - C. results of the inspection, including the date, time, and duration of the corrective action period from the time the inspection indicated a problem to the time of the indication that the device was replaced or restored to operation.
  - v. For each cyclone installed, you must keep records including the following information:
    - A. If you demonstrate that the cyclone is designed to reduce emission of particulate matter (PM, not PM-10) by 95 percent or greater by manufacturer's specifications, you must keep the records of:
      - I. Information from the manufacturer regarding the design efficiency of the cyclone,
      - II. The inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone, and
      - III. The operation and maintenance procedures to ensure proper operation of the cyclone.
    - B. If you demonstrate that the cyclone is designed to reduce emissions of particulate matter by 95 percent or greater by certification by a professional engineer, you must keep the records of:

- I. Certification regarding the design efficiency of the cyclone, along with supporting information,
    - II. The inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone, and
    - III. The standard maintenance and operating procedures that ensure proper operation of the cyclone.
  - C. If you demonstrate that the cyclone is designed to reduce emissions of particulate matter by 95 percent or greater by a performance test, you must keep the records of:
    - I. Results of the testing conducted in accordance with § 63.11623 (Method 5),
    - II. The inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone, and
    - III. The standard maintenance and operating procedures that ensure proper operation of the cyclone.
  - D. You must keep records of all quarterly inspections, including the following:
    - I. Date, place, and time of each inspection,
    - II. Person performing the inspection,
    - III. Records of the daily inlet flow rate, inlet velocity, pressure drop, or fan amperage measurements, and
    - IV. Results of the inspection, including the date, time, and duration of the corrective action period from the time the inspection indicated a problem to the time of the indication that the cyclone was restored to proper operation.
- vi. If daily feed production level is less than 50 tons per day, the source must keep daily feed production records on site. (The Average Daily Feed Production Level is defined above.) The Notification of Compliance Status and/or ACC report must indicate this level in the year that the daily feed production level is less than 50 tons per day.
- vii. Records must be in a form suitable and readily available for expeditious review. All records must be maintained for 5 years and must be kept on-site for a minimum of 2 years. Records may be kept offsite for the remaining 3 years.
- viii. Per 40 CFR 63.11624(d) – Facilities that discontinue Cr and Mn after January 5, 2010 must submit a Notification to the agency (NC DAQ) that they are no longer subject to the rule (indicating an effective date). The Notification shall include the Company's Name and Address, and a statement by a responsible official indicating that the facility no longer uses materials that contain Cr or Mn. This statement should also include an effective date for the termination of use of materials that contain Cr or Mn, and the responsible official's name, title, phone number, e-mail address and signature.