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## 40 C.F.R. § 49.10711

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### Federal Implementation Plan for the Astaris-Idaho LLC Facility (formerly owned by FMC Corporation) in the Fort Hall PM-10 Nonattainment Area.

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(a) *Applicability.* This section applies to the owner(s) or operator(s) of the Astaris-Idaho LLC's elemental phosphorus facility located on the Fort Hall Indian Reservation in Idaho, including any new owner(s) or operator(s) in the event of a change in ownership or operation of the Astaris-Idaho facility.

(b) *Definitions.* The terms used in this section retain the meaning accorded them under the Clean Air Act, except as follows:

*Astaris-Idaho or Astaris-Idaho facility* means all of the pollutant-emitting activities that comprise the elemental phosphorus plant owned by or under the common control of Astaris-Idaho LLC in Township 6 south, Range 33 east, Sections 12, 13, and 14, and that lie within the exterior boundaries of the Fort Hall Indian Reservation, in Idaho, including, without limitation, all buildings, structures, facilities, installations, material handling areas, storage piles, roads, staging areas, parking lots, mechanical processes and related areas, and other processes and related areas. For purposes of this section, the term “Astaris-Idaho” or “Astaris-Idaho facility” shall not include pollutant emitting activities located on lands outside the exterior boundaries of the Fort Hall Indian Reservation.

*Bag leak detection guidance* means Office of Air Quality Planning and Standards (OAQPS): Fabric Filter Bag Leak Detection Guidance, EPA 454/R-98-015 (Sept. 1997).

*Begin actual construction* means, in general, initiation of physical on-site construction activities on a source which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in the method of operating, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

*Certified observer* means a visual emissions observer who has been properly certified using the initial certification and periodic semi-annual recertification procedures of 40 CFR part 60, appendix A, Method 9.

*Construction* means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of a source) which would result in a change in actual emissions.

*Emergency* means any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of the Astaris-Idaho facility, including acts of God, which requires immediate corrective action to restore normal operation. An emergency shall not include events caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

*Emission limitation or emission standard* means a requirement which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operations or maintenance procedures to assure

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continuous emission reduction.

*EPA* means United States Environmental Protection Agency, Region 10.

*Excess emissions* means emissions of an air pollutant in excess of an emission limitation.

*Excursion* means a departure from a parameter range approved under paragraphs (e)(3) or (g)(1) of this section, consistent with any averaging period specified for averaging the results of monitoring.

*Fugitive emissions* means those emissions that do not actually pass through a stack, chimney, vent, or other functionally equivalent opening.

*Malfunction* means any sudden and unavoidable breakdown of process or control equipment. A sudden breakdown which could have been avoided by better operation and maintenance is not a malfunction.

*Method 5* is the reference test method described in 40 CFR part 60, appendix A, conducted in accordance with the requirements of this section.

*Method 9* is the reference test method described in 40 CFR part 60, appendix A.

*Methods 201, 201A, and 202* are the reference test methods described in 40 CFR part 51, appendix M, conducted in accordance with the requirements of this section.

*Mini-flush* means the process of flushing elemental phosphorus, which has solidified in the secondary condenser, to the elevated secondary condenser flare or to the ground flare, and thus into the atmosphere.

*Modification* means any physical change in or a change in the method of operation of, an existing source which increases the amount of particulate matter emitted by that source. The following shall not, by themselves, be considered modifications:

- (1) Maintenance, repair, and replacement which the Regional Administrator determines to be routine for the particular source;
- (2) An increase in production rate of an existing source, if that increase can be accomplished without a physical change to the source or the Astaris-Idaho facility;
- (3) An increase in the hours of operation of an existing source, if that increase can be accomplished without a physical change to the source or the Astaris-Idaho facility;
- (4) Use of an alternative fuel or raw material, if the existing source is capable of accommodating that alternative without a physical change to the source or the Astaris-Idaho facility; or
- (5) The addition, replacement, or use of any system or device whose primary function is the reduction of an air pollutant, except when an emissions control system is removed or replaced by a system which the Regional Administrator determines to be less environmentally beneficial.

*Monitoring malfunction* means any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not monitoring malfunctions.

*O&M plan* means an operation and maintenance plan developed by Astaris-Idaho and submitted to EPA in accordance with paragraph (e)(8) of this section.

*Opacity* means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

*Opacity action level* means the level of opacity of emissions from a source requiring the owner or operator of the Astaris-Idaho facility to take prompt corrective action to minimize emissions, including without limitation those actions described in the approved operations and maintenance plan.

*Owner or operator* means any person who owns, leases, operates, controls, or supervises the Astaris-Idaho facility or any portion thereof.

*Particulate matter* means any airborne finely-divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

*PM-10 or PM-10 emissions* means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal ten micrometers emitted to the ambient air as measured by an applicable reference method such as Method 201, 201A, or 202, of 40 CFR Part 51, appendix M, or an equivalent or alternative method specifically approved by the Regional Administrator.

*Regional Administrator* means the Regional Administrator, EPA Region 10, or a duly designated representative of the Regional Administrator.

*Road* means access and haul roads, driveways or established vehicle paths, permanent or temporary, which are graded, constructed, used, reconstructed, improved, or maintained for use in vehicle movement throughout the Astaris-Idaho facility.

*Shutdown* means the cessation of operation of a source for any purpose.

*Slag Pit Area* means the area of the Astaris-Idaho facility immediately bordering the south side of the furnace building extending out 100 yards.

*Source* means any building, structure, facility, installation, material handling area, storage pile, road, staging area, parking lot, mechanical process or related area, or other process or related area which emits or may emit particulate matter.

*Startup* means the setting in operation of a source for any purpose.

*Title V permit* means an operating permit issued under 40 CFR part 70 or 71.

*Tribes* means the Shoshone-Bannock Tribes.

*Visible emissions* means the emission of pollutants into the atmosphere, excluding uncombined condensed water vapor (steam), that is observable by the naked eye.

*Visual observation* means the continuous observation of a source for the presence of visible emissions for a period of ten consecutive minutes conducted in accordance with section 5 of EPA Method 22, 40 CFR part 60, appendix A, by a person who meets the training guidelines described in section 1 of Method 22.

(c) *Emission limitations and work practice requirements.* (1)(i) Except as otherwise provided in paragraphs (c)(1)(ii), (c)(1)(iii), and (c)(2) of this section, there shall be no visible emissions from any location at the Astaris-Idaho facility at any time, as determined by a visual observation.

(ii) Emissions from the following equipment, activities, processes, or sources shall not exceed 20% opacity

over a six minute average. Method 9, of 40 CFR part 60, appendix A, is the reference test method for this requirement.

- (A) Brazing, welding, and welding equipment and oxygen-hydrogen cutting torches;
- (B) Plant upkeep, including routine housekeeping, preparation for and painting of structures;
- (C) Grinding, sandblasting, and cleaning operations that are not part of a routine operation or a process at the Astaris-Idaho facility;
- (D) Cleaning and sweeping of streets and paved surfaces;
- (E) Lawn and landscaping activities;
- (F) Repair and maintenance activities;
- (G) Landfill operations;
- (H) Laboratory vent stacks; and
- (I) Pond piping discharges.

(iii) Except as otherwise provided in paragraph (c)(1)(ii) of this section, emissions from equipment, activities, processes, or sources not identified in Table 1 to this section shall not exceed 10% opacity over a six minute average provided that Astaris-Idaho has complied with the requirements of paragraph (c)(11) of this section and provided further that a more stringent opacity limit has not been established for the source in this section. Method 9, 40 CFR Part 60, appendix A, is the reference test method for this requirement.

(2) For each source identified in Column II of Table 1 to this section, the owner or operator of the Astaris-Idaho facility shall comply with the emission limitations and work practice requirements for that source established in Column III of Table 1 to this section.

(3) The opacity limits for the following fugitive emission sources, which are also identified in Column II of Table 1 to this section, apply to adding of material to, taking of material from, reforming, or otherwise disturbing the pile: main shale pile (Table 1 of this section, source 2), emergency/contingency raw ore shale pile (Table 1 of this section, source 3), stacker and reclaimer (Table 1 of this section, source 4), recycle material pile (Table 1 of this section, source 8b), nodule pile (Table 1 of this section, source 11), and screened shale fines pile (Table 1 of this section, source 14).

(4)

(i) Except as provided in paragraph (c)(4)(ii) of this section, beginning November 1, 2000, the following activities shall be prohibited:

(A) The discharge of molten slag from furnaces or slag runners onto the ground, pit floors (whether dressed with crushed slag or not), or other non-mobile permanent surface.

(B) The digging of solid slag in the slag pit area or the loading of slag into transport trucks in the slag pit area.

(ii) The prohibition set forth in paragraph (c)(4)(i) of this section shall not apply to the lining of slag pots and the handling (including but not limited to loading, crushing, or digging) of cold slag for purposes of the lining of slag pots.

(5)

(i) Beginning January 1, 2001, no furnace gas shall be burned in the existing elevated secondary condenser flare or the existing ground flare (Table 1 of this section, source 26a).

(ii) Until December 31, 2000, the owner or operator of the Astaris-Idaho facility shall take the following measures to reduce PM-10 emissions from mini-flushes and to ensure there is no bias toward conducting mini-flushes during night-time hours.

(A) Mini-flushes shall be limited to no more than 50 minutes per day (based on a monthly average) beginning January 1, 1999. Failure to meet this limit for any given calendar month will be construed as a separate violation for each day during that month that mini-flushes lasted more than 50 minutes. The monthly average for any calendar month shall be calculated by summing the duration (in actual minutes) of each mini-flush during that month and dividing by the number of days in that month.

(B)(1) No mini-flush shall be conducted at any time unless one of the following operating parameters is satisfied:

(i) The flow rate of recirculated phosphy water is equal to or less than 1800 gallons per minute; or

(ii) The secondary condenser outlet temperature is equal to or greater than 36 degrees Centigrade.

(2) The prohibition set forth in paragraph (c)(5)(ii)(B)(1) of this section shall not apply during periods of malfunction or emergency, provided the owner or operator of the Astaris-Idaho facility complies with the requirements of paragraph (c)(9) of this section.

(6) At all times, including periods of startup, shutdown, malfunction, or emergency, the owner or operator of the Astaris-Idaho facility shall, to the extent practicable, maintain and operate each source of PM-10 at the Astaris-Idaho facility, including without limitation those sources identified in Column II of Table 1 to this section and associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Regional Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(7) Maintaining operation of a source within approved parameter ranges, promptly taking corrective action, and otherwise following the work practice, monitoring, record keeping, and reporting requirements of this section do not relieve the owner or operator of the Astaris-Idaho facility from the obligation to comply with applicable emission limitations and work practice requirements at all times.

(8) An affirmative defense to a penalty action brought for emissions in excess of an emission limitation shall be available if the excess emissions were due to startup or shutdown and all of the following conditions are met:

(i) The owner or operator of the Astaris-Idaho facility notifies EPA and the Tribes in writing of any startup or shutdown that is expected to cause excess emissions. The notification shall be given as soon as possible, but no later than 48 hours prior to the start of the startup or shutdown, unless the owner or operator demonstrates to EPA's satisfaction that a shorter advanced notice was necessary. The notice shall identify the expected date, time, and duration of the excess emissions event, the source involved in the excess emissions event, and the type of excess emissions event.

(ii) The periods of excess emissions that occurred during startup or shutdown were short and infrequent and could not have been prevented through careful planning and design.

- (iii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance.
  - (iv) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.
  - (v) At all times, the facility was operated in a manner consistent with good practice for minimizing emissions.
  - (vi) The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable.
  - (vii) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality.
  - (viii) All emission monitoring systems were kept in operation if at all possible.
  - (ix) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence.
  - (x) The owner or operator of the Astaris-Idaho facility submitted notice of the startup or shutdown to EPA and the Tribes within 48 hours of the time when emission limitations were exceeded due to startup or shutdown. This notice fulfills the requirement of paragraph (g)(5) of this section. This notice must contain a description of the startup or shutdown, any steps taken to mitigate emissions, and corrective actions taken.
  - (xi) No exceedance of the 24-hour PM<sub>10</sub> National Ambient Air Quality Standard, 40 CFR 50.6(a) was recorded on any monitor located within the Fort Hall PM<sub>10</sub> nonattainment area that regularly reports information to the Aerometric Information Retrieval System-Air Quality Subsystem, as defined under 40 CFR 58.1(p), on any day for which the defense of startup or shutdown is asserted.
  - (xii) In any enforcement proceeding, the owner or operator of the Astaris-Idaho facility has the burden of proof on all requirements of this paragraph (c)(8).
- (9) An affirmative defense to a penalty action brought for emissions in excess of an emission limitation shall be available if the excess emissions were due to an emergency or malfunction and all of the following conditions are met:
- (i) The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator of the Astaris-Idaho facility.
  - (ii) The excess emissions;
    - (A) Did not stem from any activity or event that could have been foreseen and avoided or planned for; and
    - (B) Could not have been avoided by better operation and maintenance practices.
  - (iii) To the maximum extent practicable the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions.
  - (iv) Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable.
  - (v) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions.
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- (vi) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality.
- (vii) All emission monitoring systems were kept in operation if at all possible.
- (viii) The owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence.
- (ix) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

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