

REGULATION III – CONTROL OF AIR CONTAMINANTS

**RULE 301
PRODUCT TRANSFER OPERATIONS**

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Adopted xx/xx/xx

**MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 301
PRODUCT TRANSFER OPERATIONS**

SECTION 100 – GENERAL

- 101** **PURPOSE:** To limit the emission of particulate matter into the ambient air from any combination of processes transferring, distributing, loading, and/or bagging of unhydrated cement, lime, fly ash, and/or other pozzolan or products blended with unhydrated cement, lime, fly ash, and/or other pozzolan.
- 102** **APPLICABILITY:** The provisions of this rule apply to any combination of processes located in Maricopa County used for transferring, distributing, loading, and/or bagging unhydrated cement, lime, fly ash, and/or other pozzolan or products blended with unhydrated cement, lime, fly ash, and/or other pozzolan. The provisions of this rule also apply to bagging operations, silos, preparing product for transferring and/or distributing, unhydrated cement, lime, fly ash, and/or other pozzolan or products blended with cement, lime, fly ash, and/or other pozzolan. Compliance with the provisions of this rule does not relieve any person subject to the requirements of this rule from complying with other applicable rules and regulations. Whenever more than one rule, regulation, or emission limit applies to product transfer operations subject to this rule, the more stringent standard applies.
- 103** **EXEMPTIONS:**
- 103.1** The provisions of this rule do not apply to concrete batch plants.
- 103.2** The provisions of this rule do not apply to water treatment facilities.

SECTION 200 – DEFINITIONS: For the purpose of this rule, the following definitions apply, in addition to those definitions found in Rule 100: General Provisions And Definitions of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

- 201** **APPROVED EMISSION CONTROL SYSTEM (ECS)** – A system for reducing particulate emissions, consisting of collection and/or control devices which are approved in writing by the Control Officer and are designed and operated in accordance with good engineering practice.
- 202** **AREA ACCESSIBLE TO THE PUBLIC** – Any paved parking lot or paved roadway that can be entered or used for public travel primarily for purposes unrelated to the dust-generating operation.

Comment [JMK1]: Revised the "purpose" of Rule 301 – a combination of Arizona Rock Products Association's (ARPA's) comments, Chris Jacquemin's comments, and department staff meeting.

ARPA's comments: "ARPA requests "products made with cement, lime, fly ash, and/or other pozzolan" be removed since "products made" from these materials would not be found at transfer facilities."

Chris Jacquemin's comments: "Consider the following revisions: To limit the emission of particulate matter into the ambient air from any facility/source where the unhydrated powdered form of bulk cementitious and/or finely divided materials are transferred, loaded, bagged, containerized, and/or temporarily stored pending transfer, loading, and/or containerization. Cementitious and/or fine materials include hydraulic cements, lime, fly ash, and other pozzolanic materials, such as volcanic ash and calcined diatomaceous earth, and blended products which contain at least one percent by weight of the unhydrated powdered form of hydraulic cements, lime, fly ash, and/or other pozzolanic materials."

Comment [JMK2]: Revised the "applicability" of Rule 301 – similar to revisions made to "purpose" of Rule 301.

Comment [JMK3]: Removed reference to new Rule 303.

- 203 BAGGING OPERATION** – The mechanical process by which bags or similar containers are filled with unhydrated cement, lime, fly ash, and/or other pozzolan or products blended with unhydrated cement, lime, fly ash, and/or other pozzolan.
- 204 CEMENT** – A powder consisting of, but not limited to, alumina, silica, lime, iron oxide, and/or magnesium oxide burned together in a kiln and finely pulverized and used as an ingredient of mortar, concrete, and/or other similar product including, but not limited to, any hydraulic cement such as Portland cement.
- 205 DELIVERY TRUCK** – Any truck (including any non-motorized attachment to a truck, such as a trailer or other conveyance connected to or propelled by the actual motorized portion of the truck) that holds, stores, or delivers product to or from a product transfer operation.
- 206 DISTURBED SURFACE AREA** – A portion of the earth's surface or material placed on the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed native condition where there exists an increase in the potential for the emission of fugitive dust over the natural state or as the result of the movement, destabilization, or modification.
- 207 DUST-GENERATING OPERATION** – Any activity capable of generating fugitive dust including, but not limited to, the following activities:
- 207.1** Land clearing, maintenance, and land cleanup using mechanized equipment.
 - 207.2** Earthmoving.
 - 207.3** Weed abatement by discing or blading.
 - 207.4** Excavating.
 - 207.5** Construction.
 - 207.6** Demolition.
 - 207.7** Bulk material handling (e.g., bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations).
 - 207.8** Storage and/or transporting operations (e.g., open storage piles).
 - 207.9** Operation of any outdoor equipment.
 - 207.10** Operation of motorized machinery.
 - 207.11** Establishing and/or using staging areas, parking areas, material storage areas, or access routes to and from a site.
 - 207.12** Establishing and/or using unpaved haul/access roads to, from, and within a site.
 - 207.13** Disturbed surface areas associated with a site.
 - 207.14** Installing initial landscapes using mechanized equipment.
- 208 DUST SUPPRESSANT** – Water, hygroscopic material, solution of water and chemical surfactant, foam, non-toxic chemical stabilizer, or any other non-toxic dust palliative, which is not prohibited for ground surface application by the Environmental Protection Agency (EPA) or the Arizona Department of Environmental Quality (ADEQ), which effectively reduces the fugitive dust emissions.

Comment [JMK4]: Revised definition of "bagging operation" – similar to revisions made to "purpose" and "applicability".

Intention is that "bagging operations" are subject to Rule 301.

- 209 END OF WORKDAY** – The end of a working period that may include one or more work shifts. If working 24 hours a day, the end of a working period is considered no later than 8 pm.
- 210 FABRIC FILTER BAGHOUSE** – A device in which particulates are removed from the stream of exhaust gases using permeable fabric bags.
- 211 FLY ASH** – Any product of coal combustion, such as fly ash, cenosphere ash, bottom ash, and fluidized bed coal combustion ash, that is recovered for use as a cement or lime additive, absorbent, gas scrubber, plastics filler or any other beneficial use and that is exempt from regulation as a hazardous waste under 40 C.F.R. § 261.4.
- 212 FUGITIVE DUST CONTROL MEASURE** – A technique, practice, or procedure used to prevent, minimize, or reduce the actual or potential generation, emission, entrainment, suspension, or airborne transport of fugitive dust.
- 213 FUGITIVE DUST EMISSION** – Particulate matter not collected by a capture system that is entrained in the ambient air and is caused by human and/or natural activities.
- 214 LEVEL INDICATOR SYSTEM** – A system that senses the level of material in the silo with a properly functioning and operating device or process used to send a signal indicating the silo is approaching the full condition or is full to its maximum capacity.
- 215 LIME** – Any calcinated limestone including, but not limited to, hydraulic lime.
- 216 MOTOR VEHICLE** – A self-propelled vehicle for use on the public roads and highways of the State of Arizona and required to be registered under the Arizona State Uniform Motor Vehicle Act including any non-motorized attachments including, but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.
- 217 NEW FACILITY** - A facility subject to this rule that has not been operated prior to June 8, 2005.
- 218 PARTICULATE MATTER EMISSIONS** – Any and all finely divided solid or liquid materials other than uncombined water released to the ambient air as measured by the applicable state and federal test methods.
- 219 PAVE** – To apply asphalt, concrete, or other similar material to a roadway surface including, but not limited to, asphaltic concrete, concrete pavement, chip seal, rubberized asphalt, recycled asphalt mixed with a binder, or recycled asphalt with a minimum asphalt content of 4.0%.
- 220 POZZOLAN** – Any of finely divided siliceous or siliceous and aluminous materials that react chemically with slaked lime at ordinary temperature and in the presence of moisture to form a strong, slow-hardening cement.

Comment [JMK5]: Added, per ARPA's comments – "ARPA requests the definition of "level indicator system" be added as a "system which senses the level of material in the silo with a proper functioning and operating device or process used to send a signal indicating the silo is approaching the full condition or is full to its maximum capacity."

The term "level indicator" is used in Sections 301.2(a) and 501.2(b).

Comment [JMK6]: Removed the phrase "by such facility".

Comment [JMK7]: Added phrase, per ARPA's comments – "What if RAP is used with a different binder other than asphalt? Revision/definition of "pave" is the same as in Rule 316.

- 221 PRESSURE CONTROL SYSTEM** – System in which loads are moved in the proper sequence, at the correct time, and at the desired speed through the use of valves that control the direction of air flow, regulate actuator speed, or respond to changes in air pressure.
- 222 PROCESS** - One or more operations including those using equipment and technology in the production of goods or services or the control of by-products or waste.
- 223 PRODUCT TRANSFER OPERATION** – Any combination of processes used for transferring, distributing, loading, and/or bagging unhydrated cement, lime, fly ash, and/or other pozzolan or products blended with unhydrated cement, lime, fly ash, and/or other pozzolan.
- 224 SILO** - An elevated container with a top with the potential to store, release, or transfer material through one or more openings or transfer points.
- 225 SPILLAGE** – Material caused or allowed, especially accidentally or unintentionally, to flow, run, or fall out, over, or off the equipment used in the product transfer operation when such material is not captured or collected and becomes wasted, scattered, or lost while being transferred, distributed, loaded, and/or bagged at a product transfer operation or after having been transferred, distributed, loaded, and/or bagged at a product transfer operation, where such material has the potential to generate or cause fugitive dust.
- 226 STACK EMISSIONS** – Emissions that are released to the atmosphere from a capture system through a building vent, stack or other point source discharge that include particulate matter or other emissions which have the potential to become particulate matter when released into the atmosphere or combined with other emissions from the same source.
- 227 TRACKOUT** – Any material that has the potential to produce fugitive dust and to adhere to and agglomerate on the surfaces of motor vehicles, haul trucks, and/or equipment (including tires) and that has fallen or been deposited onto an area accessible to the public.
- 228 UNPAVED ROAD** – Any road or equipment path that is not paved. For the purpose of this rule, an unpaved road is not a horse trail, hiking path, bicycle path, or other similar path used exclusively for purposes other than travel by motor vehicles.

Comment [JMK8]: Changed “and” to “or”, per ARPA’s comments – “This allows for different types of devices.”

Comment [JMK9]: Revised definition of “product transfer operation” – similar to revisions made to “purpose” and “applicability”.

Comment [JMK10]: Revised, per Chris Jacquemin’s comments – “Consider the following revisions: “Material which intentionally, unintentionally, or accidentally flows, runs, falls, or is released from the equipment used in a product transfer operation that is not captured or collected but is wasted, scattered, and/or lost in a location where the material has the potential to generate or cause fugitive dust.”

SECTION 300 – STANDARDS

301 PROCESS EMISSION LIMITATIONS AND CONTROLS:

- 301.1 Process Emission Limitations:** An owner, operator, or person subject to this rule shall not discharge, cause, or allow to be discharged into the ambient air:
- a. Stack emissions exceeding 5% opacity.
 - b. Fugitive dust emissions exceeding 7% opacity from any process.

Comment [JMK11]: Returned the term “shall” throughout the rule.

301.2 Process Controls: Any owner, operator, or person subject to this rule shall implement all of the following process controls:

- a. If off-loading or unloading from a railcar into a silo or from a delivery truck into a silo, install or operate a level indicator, an overflow warning system, or an over-full system/device or sensor to shut-off the system. The system/device shall be designed to alert and allow the operator(s) to stop the off-loading or unloading operation when the silo(s) are reaching a capacity that could adversely impact pollution control equipment.
- b. If off-loading or unloading from a silo into a delivery truck, comply with all of the following:
 - (1) Load on properly calibrated scale to avoid overfilling;
 - (2) Install and operate an adequately vented dust recovery spout; and
 - (3) Comply with the opacity standard described in Section 301.1(b) of this rule.
- c. On every new silo, install and operate a properly sized fabric filter baghouse or equivalent device. The baghouse or equivalent device shall be designed to meet a maximum outlet grain loading of 0.01 gr/dscf.
- d. On every bagging and/or mixing operation, install and operate one or more of the following process controls:
 - (1) An effective and properly sized fabric filter baghouse and delivery system; or
 - (2) An enclosure that allows bagging and/or mixing to be conducted without any visible emissions from the enclosure during any portion of a bagging and/or mixing activity.

Comment [JMK12]: Combined Sections 301.2(a) and (b) and added "or from a delivery truck into a silo", per ARPA's comments – "ARPA requests that "and delivery truck" be added after "railcar" and Section 301.2(b) be deleted. Sections 301.2(a) and (b) should be combined, since there is generally no difference between off-loading a truck and a railcar. If you add "delivery truck" to Section 301.2(a), then (b) can be deleted."

Comment [JMK13]: Combined Sections 301.2(b) and (e) and revised Section 301.2(b), per ARPA's comments – "ARPA members are unclear what a "baghouse intake manifold" is. ARPA suggests replacing Section 301.2(e) with the following best practice language for off-loading of trucks: If off-loading or unloading from a silo into a delivery truck, load on properly calibrated scale to avoid overfilling, install and operate an adequately vented dust recovery spout, and comply with the opacity standard consistent with Section 301.1(b)."

301.3 Spillage:

- a. An owner, operator, or person subject to this rule shall not allow spillage to extend a cumulative distance of 12 linear feet or more in any work area or on any paved surface.
- b. An owner, operator, or person subject to this rule shall remove all spillage in any work area or on any paved surface once per day or at the end of a workday.

302 AIR POLLUTION CONTROL EQUIPMENT AND APPROVED EMISSION CONTROL SYSTEM (ECS): An owner, operator, or person subject to this rule shall

provide, properly install and maintain in calibration, in good working order, and in operation air pollution control equipment required by this rule.

302.1 Operation and Maintenance (O&M) Plan Requirements For An ECS:

- a. An owner, operator, or person subject to this rule shall provide and maintain readily available on-site at all times (an) O&M Plan(s) for any ECS and any ECS monitoring devices that are used to comply with this rule or to an air pollution control permit.
- b. An owner, operator, or person subject to this rule shall submit to the Control Officer for review every O&M Plan(s) for any ECS including any ECS monitoring device that is used to comply with this rule or to an air pollution control permit.
- c. An owner, operator, or person subject to this rule operating an ECS shall install, maintain, and accurately calibrate monitoring devices described in the O&M Plan(s) including, but not limited to, monitoring devices that measure either leveling or pressure differentials and other operating conditions necessary to determine if control devices are functioning properly.
- d. An owner, operator, or person, who is required to have an O&M Plan for any ECS including any ECS monitoring devices shall fully comply with all elements of an O&M Plan(s) including, but not limited to, every action, schedule, and condition identified in each O&M Plan.
- e. An O&M Plan for any ECS including any ECS monitoring devices shall include all of the following information:
 - (1) ECS equipment manufacturer,
 - (2) ECS equipment model,
 - (3) ECS equipment identification number or identifier that owner, operator, or person subject to this rule assigns to such ECS equipment when manufacturer's equipment identification number is unknown, and
 - (4) Information required by Sections 501.2 and 501.3 of this rule.
- f. The owner, operator, or person subject to this rule, who receives a written notice from the Control Officer that the O&M Plan is deficient or inadequate, shall make written revisions to the O&M Plan for any ECS including any ECS monitoring devices and shall submit such revised O&M Plan to the Control Officer within five working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon written request, for good cause. During the time that such owner, operator, or person subject to this rule is preparing revisions to the O&M Plan, such owner, operator, or person shall still comply with all requirements of this rule.

Comment [JMK14]: Added, per ARPA's comments – "Before the word "pressure", add "either leveling or".

Comment [JMK15]: Revised O&M Plan requirements, per department meeting.

Comment [JMK16]: Deleted proposed phrase "that the owner, operator, or person has submitted for approval, even if such O&M Plan(s) have not yet been approved, unless notified in writing by the Control Officer", per ARPA's comments – "It does not make sense for companies to invest in the equipment and resources necessary to comply with the conditions in a proposed O&M Plan before that plan has been approved..."

Comment [JMK17]: Deleted proposed Section 302.1(f) "The Control Officer may issue a written notice to the owner, operator, or person subject to this rule, if the Control Officer determines any of the following: (1) That an O&M Plan is incomplete; (2) That an O&M Plan is approved; or (3) That an approved O&M Plan has been followed, yet emissions still exceed the standards of this rule and, therefore, a revised O&M Plan is required." Re-numbered "Section 302.1(g)" to "Section 302.1(f)".

Comment [JMK18]: Changed "three" to "five" – as a compromise to ARPA's comments that "three" be changed to "15" "...due to vacations or forms that are sent to corporate and the person responsible for filing them does not receive them in three days, as an example."

302.2 Operation And Maintenance (O&M) Plan Requirements For Fugitive Dust Control Measures:

- a. An owner, operator, or person subject to this rule shall provide and maintain readily available on-site at all times (an) O&M Plan(s) for equipment associated with any process fugitive emissions and fugitive dust control measures including, but not limited to, gravel pads, wheel washers, truck washers, rumble grates, watering systems, and street sweepers that are implemented to comply with this rule or to an air pollution control permit.
- b. An owner, operator, or person subject to this rule shall submit to the Control Officer for review every O&M Plan(s), which prescribes operating and maintenance procedures, for any equipment associated with any process fugitive emissions and fugitive dust control measures.
- c. An owner, operator, or person, who is required to have an O&M Plan for any equipment associated with any process fugitive emissions and fugitive dust control measures, shall fully comply with all elements of an O&M Plan(s) including, but not limited to, every action, schedule, and condition identified in each O&M Plan.
- d. An O&M Plan for any equipment associated with any process fugitive emissions and fugitive dust control measures shall include all of the following information:
 - (1) Equipment identification number or identifier that owner, operator, or person subject to this rule assigns to such equipment when manufacturer's equipment identification is unknown;
 - (2) Operating parameters;
 - (3) Number of each piece of equipment; and
 - (4) Information required by Sections 501.2 and 501.3 of this rule.
- e. The owner, operator, or person subject to this rule, who receives a written notice from the Control Officer that the O&M Plan is deficient or inadequate, shall make written revisions to the O&M Plan and shall submit such revised O&M Plan to the Control Officer within five working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon written request, for good cause. During the time that such owner, operator, or person subject to this rule is preparing revisions to the O&M Plan, such owner, operator, or person shall still comply with all requirements of this rule.

Comment [JMK19]: Deleted "evaluation and approval" and added "review", per department meeting.

Comment [JMK20]: Revised O&M Plan requirements, per department meeting.

Comment [JMK21]: Deleted proposed phrase "that the owner, operator, or person has submitted for approval, even if such O&M Plan(s) have not yet been approved, unless notified in writing by the Control Officer", per ARPA's comments – "It does not make sense for companies to invest in the equipment and resources necessary to comply with the conditions in a proposed O&M Plan before that plan has been approved..."

Comment [JMK22]: Deleted proposed Section 302.2(e) "The Control Officer may issue a written notice to the owner, operator, or person subject to this rule, if the Control Officer determines any of the following: (1) That an O&M Plan is incomplete; (2) That an O&M Plan is approved; or (3) That an approved O&M Plan has been followed, yet emissions still exceed the standards of this rule and, therefore, a revised O&M Plan is required." Re-numbered "Section 302.2(f)" to "Section 302.2(e)".

Comment [JMK23]: Changed "three" to "five" – as a compromise to ARPA's comments that "three" be changed to "15" "...due to vacations or forms that are sent to corporate and the person responsible for filing them does not receive them in three days, as an example."

303 FUGITIVE DUST EMISSION LIMITATIONS: An owner, operator, or person subject to this rule shall comply with the following fugitive dust emission limitations at all times and in all areas of a site, unless specified as applying in a specific area of a site.

303.1 20% Opacity Limitation: For emissions that are not already regulated by an opacity limit, an owner, operator, or person subject to this rule shall not discharge, cause, or allow to be discharged into the ambient air fugitive dust emissions exceeding 20% opacity, in accordance with the test methods described in Section 502 of this rule and in Appendix C-Fugitive Dust Test Methods of these rules.

303.2 Visible Emission Limitation Beyond The Property Line: An owner, operator, or person subject to this rule shall not discharge, cause, or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated.

303.3 Silt Loading And Silt Content Standards For Unpaved Roads And Unpaved Parking And Staging Areas:

- a. For unpaved roads, an owner, operator, or person subject to this rule shall not allow silt loading equal to or greater than 0.33 oz/ft². However, if silt loading is equal to or greater than 0.33 oz/ft², then the owner, operator, or person shall not allow the silt content to exceed 6%. Silt loading and silt content standards for unpaved roads shall be determined in accordance with the appropriate test methods described in Section 503 of this rule and in Appendix C-Fugitive Dust Test Methods of these rules.
- b. For unpaved parking and staging areas, an owner, operator, or person subject to this rule shall not allow silt loading equal to or greater than 0.33 oz/ft². However, if silt loading is equal to or greater than 0.33 oz/ft², then the owner, operator, or person shall not allow the silt content to exceed 8%. Silt loading and silt content standards for unpaved parking and staging areas shall be determined in accordance with the appropriate test methods described in Section 503 of this rule and in Appendix C-Fugitive Dust Test Methods of these rules.

Comment [JMK24]: Added, per EPA's comments – "Section 503 specifies test methods that must be used to determine stabilization standards in Section 304, including a silt content test method. However, Section 303.3 also contains requirements for silt loading and silt content for unpaved roads and unpaved parking and staging areas. Please clarify which test methods sources are required to use to demonstrate compliance with this option."

Comment [JMK25]: Added, per EPA's comments – "Section 503 specifies test methods that must be used to determine stabilization standards in Section 304, including a silt content test method. However, Section 303.3 also contains requirements for silt loading and silt content for unpaved roads and unpaved parking and staging areas. Please clarify which test methods sources are required to use to demonstrate compliance with this option."

304 STABILIZATION STANDARDS:

304.1 In addition to complying with the fugitive dust emission limitations described in Section 303 of this rule, if any portion of a site is not moist/wet, the owner, operator, or person subject to this rule shall stabilize the site in order to meet at least one of the standards listed below, as applicable:

- a. Maintain a soil crust;
- b. Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;

- c. Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
- d. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%;
- e. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;
- f. Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
- g. Request an alternative to these requirements. Such request shall meet the requirements in [Section 309 of this rule](#).

304.2 If a site that is being stabilized according to Section 304.1 of this rule contains more than one type of visibly distinguishable stabilization characteristics, soil, vegetation, or other characteristics, the owner, operator, or person subject to this rule shall test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, in accordance with the appropriate test methods described in Section 503 of this rule and in Appendix C-Fugitive Dust Test Methods of these rules.

305 FUGITIVE DUST CONTROL MEASURES: An owner, operator, or person subject to this rule shall install, maintain, and use the fugitive dust control measures described in this section of this rule, in addition to complying with the fugitive dust emission limitations described in Section 303 of this rule. An owner, operator, or person subject to this rule may request an alternative to these requirements. Such request shall meet the requirements in Section 309 of this rule.

305.1 On-Site Traffic:

- a. An owner, operator, or person subject to this rule shall install and maintain a paved surface on areas of a product transfer operation on which motor vehicles drive or on which machinery and/or equipment, other than rail cars or trackmobiles, operate in the product transfer operation.
- b. An owner, operator, or person subject to this rule may request an alternative to Section 305.1(a) of this rule. Such request shall meet the requirements in Section 309 of this rule.

305.2 Boneyards / Equipment Storage Areas: An owner, operator, or person subject to this rule shall implement one or more of the following fugitive dust control measures in boneyards / equipment storage areas:

Comment [JMK26]: Removed reference to "Rule 307" and added procedures for approving alternatives in Section 309, per ARPA's comments – "What is "Rule 307" and what will it address? Also, what will operations do until it is developed? How will this be handled if the County agrees to move forward in getting Rule 316 adopted quickly? The County agreed in the meeting that this reference would have to come out, but where would industry reference alternative method requirements? Rule 316, Section 314 perhaps?"

- a. Apply water;
- b. Apply a dust suppressant other than water; or
- c. Apply and maintain gravel, recycled asphalt, or other suitable material.

305.3 Trackout:

- a. An owner, operator, or person subject to this rule shall not allow trackout to extend a cumulative distance of 25 linear feet or more from all exits onto areas accessible to the public.
- b. All accumulations of trackout on areas accessible to the public, including curbs, gutters, and sidewalks, shall be cleaned up and removed at the end of the workday.

305.4 Open Storage Piles: The owner, operator, or person subject to this rule shall implement one or more of the following fugitive dust control measures on all open storage piles:

- a. Construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%; or
- b. Cover open storage piles with tarps, plastic, or other material to prevent wind from removing the coverings.

306 FACILITY INFORMATION SIGN: The owner, operator, or person subject to this rule shall erect and maintain a facility information sign at the main entrance such that members of the public can easily view and read the sign at all times. Such sign shall have a white background, black block lettering that is at least four inches high, and contain at least all of the following information:

306.1 Product transfer operation name and permittee's name;

306.2 Current number of the air quality permit or of authority to operate under a general permit;

306.3 Name and local telephone number of person(s) responsible for dust control matters; and

306.4 Text stating: "For dust complaints, contact the Maricopa County Air Quality Department at (insert the current Maricopa County Air Quality Department complaint line telephone number)."

307 PERSON RESPONSIBLE FOR DUST CONTROL MATTERS: The owner, operator, or person subject to this rule shall have in place a person responsible for dust control matters, who shall meet all of the following qualifications:

307.1 Have full authority to:

- a. Conduct routine inspections, recordkeeping, and reporting to ensure that all fugitive dust control measures are installed, maintained, and used in compliance with this rule; and
- b. Install, maintain, and use fugitive dust control measures, deploy resources, and shutdown or modify activities as needed.

307.2 Successfully complete at least once every three years the Basic Dust Control Training Class conducted or approved by the Control Officer and have a valid dust training certification identification card readily accessible on-site.

308 DUST CONTROL PLAN:

308.1 An owner, operator, or person subject to this rule shall submit, to the Control Officer, a Dust Control Plan that includes, at a minimum, the following information:

- a. Name(s), address(es), and phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operations.
- b. Fugitive dust control measures to be implemented, in order to comply with Section 305 of this rule.
- c. Process emissions and controls equipment to be implemented, in order to comply with Section 301 of this rule.
- d. A drawing on 8½" x 11" paper that shows all of the following information:
 - (1) Property boundaries and project site boundaries with linear dimensions;
 - (2) Location, linear dimensions, and specific surface treatment(s), and/or control measures utilized for on-site traffic areas and boneyards / equipment storage areas of the product transfer operation;
 - (3) Location and type of trackout control device, if applicable;
 - (4) Nearest public roads;
 - (5) North arrow; and
 - (6) Planned exit locations onto areas accessible to the public.

- 308.2** The Control Officer shall approve, disapprove, or conditionally approve the Dust Control Plan, in accordance with the criteria used to approve, disapprove, or conditionally approve a permit. Failure to comply with the provisions of an approved Dust Control Plan shall be deemed a violation of this rule.
- 308.3** The Control Officer shall take final action on a Dust Control Plan within 30 calendar days of the filing of a complete Dust Control Plan. The Control Officer shall notify the applicant in writing of his approval or denial.
- 308.4** The Control Officer shall issue a written notice to the owner, operator, or person subject to this rule, if the Control Officer determines any of the following:
- a. That a Dust Control Plan is incomplete;
 - b. That a Dust Control Plan is approved; or
 - c. That an approved Dust Control Plan has been followed, yet fugitive dust emissions from any dust-generating operation still exceed the standards of this rule and, therefore, a revised Dust Control Plan is required.
- 308.5** The owner, operator, or person subject to this rule, who receives a notice as described in Section 308.4 of this rule, shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within **five** working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon written request, for good cause. During the time that such owner, operator, or person subject to this rule is preparing revisions to the Dust Control Plan, such owner, operator, or person shall still comply with all requirements of this rule.

Comment [JMK27]: Changed "three" to "five" – as a compromise to ARPA's comments that "three" be changed to "15" "...due to vacations or forms that are sent to corporate and the person responsible for filing them does not receive them in three days, as an example."

309 **ALTERNATIVE TECHNOLOGIES, CONTROLS, METHODS, OR MEASURES:**

Comment [JMK28]: Added procedures for approving alternative technologies, controls, methods, or measures. "Alternatives" are referred-to in Sections 304.1(g), 305, 305.1(b), and 503.8. In these sections, reader is directed to Section 309 for the "alternatives" approval procedures.

- 309.1** Any air pollution technologies, controls, methods, or measures installed or used shall achieve the applicable standard(s) required by this rule, as determined by the corresponding test methods, as applicable, and shall achieve other applicable standard(s) set forth in this rule.
- 309.2** Any person may submit a request to the Control Officer for the use of an alternative technology, control, method, or measure not otherwise specified in this rule. The request shall be submitted in writing to the Control Officer and shall meet all of the following requirements:
- a. Be submitted as a separate/independent document (i.e., not included with a Dust Control Plan or an O&M Plan);
 - b. Identify the owner and/or operator;

- c. Identify and describe the proposed alternative technology, control, method, or measure and identify the rule section that the requested alternative technology, control, method, or measure would replace;
- d. Include a detailed statement or report demonstrating that the proposed alternative technology, control, method, or measure would result in emission reductions that are equivalent to or exceed the emission reduction requirements otherwise specified in this rule; and
- e. Include a requested installation and implementation schedule.

Comment [JMK29]: Combined Section 309.2(c) and Section 309.2(e), per ARPA's comments – "Should c and e be combined?"

- 309.3** The Control Officer shall make an initial determination based on the information submitted whether or not the requested alternative technology, control, method, or measure is equivalent to or exceeds the respective regulatory requirements.
- 309.4** If the Control Officer determines, based on the information submitted, that the requested alternative technology, control, method, or measure is not at least equivalent to the respective regulatory requirements, the request shall be denied. The applicant and the Administrator shall be notified in writing of the decision.
- 309.5** If the Control Officer determines, based on the information submitted, that the alternative technology, control, method, or measure will be equivalent to or exceed the respective regulatory requirements, the Control Officer shall forward such determination to the Administrator and request EPA approval.
- 309.6** Following an initial approval by the Control Officer and concurrence by the Administrator, the applicant will be allowed to begin using the proposed alternative technology, control, method, or measure for a specified period, during which a complete analysis of the performance shall be conducted.
- 309.7** The applicant shall conduct testing of the alternative technology, control, method, or measure as directed by the Control Officer.
- 309.8** A final determination concerning equivalency shall be made based on testing conducted during the analysis period.
- 309.9** Notwithstanding the provisions of this section of this rule, no alternative technology, control, method, or measure otherwise subject to this rule shall be installed or otherwise implemented to meet the requirements of this rule without prior written approval from the Control Officer and concurrence by the Administrator.
- 309.10** Once an alternative technology, control, method, or measure has been approved by both the Control Officer and the Administrator, any person subject to this rule can avail themselves of the alternative that has been approved. Such person shall make written revisions to the O&M Plan and/or to the Dust Control Plan and shall submit such revised plan(s) to the Control Officer.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS: The provisions of this rule become effective upon adoption of this rule.

SECTION 500 – MONITORING AND RECORDS

501 MONITORING, RECORDKEEPING AND REPORTING: Any owner, operator, or person subject to this rule shall comply with the following requirements. Records shall be retained for five years.

501.1 Operational information required by this rule shall be kept on-site in written or electronic format and in a complete and consistent manner. Hard or electronic copies (whichever is requested) shall be made available to the Control Officer upon request.

501.2 Records of the following process and operational information, as applicable, shall be required:

a. General Data: Daily records shall be kept for all days that the product transfer operation is actively operating. Records shall include all of the following:

- (1) Hours of operation;
- (2) Throughput of bulk product loaded out per day (tons/day);
- (3) Amount of product received per day (tons/day); and
- (4) Quantity of product bagged per day (tons/day).

b. Control And Monitoring Device Data: Records of control and monitoring devices (i.e., level indicators, overflow warning systems, over-full systems/devices or sensors, pressure control systems, fabric filter baghouses, and baghouse intake manifolds) shall include all of the following:

- (1) Date of inspection;
- (2) Date of service or maintenance related activities;
- (3) Date and designation of fabric filter baghouse replacement; and
- (4) Time, date, and cause of fabric filter baghouse failure and/or down time.

501.3 O&M Plan Records: An owner, operator, or person subject to this rule shall maintain all of the following records in accordance with a complete, site-specific O&M Plan:

a. For An Emisison Control System (ECS):

- (1) Hours of operation;
- (2) Other conditions necessary to determine if the approved ECS is functioning properly;
- (3) Results of visual inspections; and
- (4) Corrective action taken, if necessary.

b. For Fugitive Dust Control Measures: Except as approved in an O&M Plan for auto-loading systems during weekends or holidays, a written record of self-inspection for each day during which a product transfer operation is in active operation. The self-inspection record shall include any inspections required by the O&M Plan and shall include all of the information described in Section 501.4 of this rule.

501.4 Dust Control Plan Records: Except as approved in an O&M Plan for auto-loading systems during weekends or holidays, an owner, operator, or person subject to this rule shall compile, maintain, and retain a written record of self-inspection of all fugitive dust control measures implemented, in order to comply with the Dust Control Plan, on each day that the product transfer operation is in active operation. Self-inspection records shall include all of the following information, as applicable:

- a. Method, frequency, and intensity of application or implementation of the fugitive dust control measures;
- b. Method, frequency, and amount of water application to the site;
- c. Types of surface treatments applied to and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps, if applicable;
- d. If contingency control measures are implemented, actual application or implementation of contingency control measures and why contingency control measures were implemented; and
- e. Names of employee(s) who successfully completed dust control training class required by Section 307 of this rule, date of the class that such employee(s) successfully completed, and name of the agency/representative who conducted such class.

502 COMPLIANCE DETERMINATION FOR PROCESS EMISSION LIMITATIONS AND CONTROLS: Compliance determinations for activities regulated by Section 301 of this rule shall be made according to the test methods for those subparts of 40 CFR Part 60, Appendix A, as listed below. Such subparts of 40 CFR Part 60, Appendix A and 40 CFR Part 51, Appendix M, are incorporated by reference as indicated. The EPA test methods as they exist in the CFR, as listed below, are incorporated by reference in Appendix G of these rules. This incorporation by reference includes no future editions or

amendments. Copies of test methods referenced in Section 502 of this rule are available at Maricopa County Air Quality Department, 1001 North Central Avenue, Phoenix, Arizona, 85004. When more than one test method is permitted for a compliance determination, then an exceedance of the limits established in this rule, determined by any of the applicable test methods, constitutes a violation of this rule.

502.1 Grain Loading: Particulate matter concentration shall be determined using the applicable EPA Reference Method 5, 40 CFR Part 60, Appendix A.

502.2 Opacity Observations: Opacity observations to measure visible emissions from activities regulated by Sections 301 and/or 303 of this rule shall be conducted in accordance with the techniques specified in EPA Reference Method 203B (Visual Determination of Opacity of Emissions from Stationary Sources for Time-Exception Regulations), 40 CFR Part 51, Appendix M. Emissions shall not exceed the applicable opacity standards described in Sections 301 and/or 303 of this rule for a period aggregating more than three minutes in any 60-minute period.

503 COMPLIANCE DETERMINATION FOR STABILIZATION STANDARDS: The stabilization standards described in Section 304 of this rule shall be determined by using the following test methods in accordance with Appendix C-Fugitive Dust Test Methods of these rules:

503.1 Appendix C, Section 2.1.2 (Silt Content Test Method) of these rules to estimate the silt content of the trafficked parts of unpaved roads (not to exceed 6%) and unpaved parking lots (not to exceed 8%).

503.2 Appendix C, Section 2.3 (Test Methods for Stabilization-Soil Crust Determination (The Drop Ball Test)) of these rules for a soil crust.

503.3 Appendix C, Section 2.4 (Test Methods for Stabilization-Determination of Threshold Friction Velocity (TFV) (Sieving Field Procedure)) of these rules for threshold friction velocity (TFV) corrected for non-erodible elements of 100 cm/second or higher.

503.4 Appendix C, Section 2.5 (Test Methods for Stabilization-Determination of Flat Vegetative Cover) of these rules for flat vegetation cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%.

503.5 Appendix C, Section 2.6 (Test Methods for Stabilization-Determination of Standing Vegetative Cover) of these rules for standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%.

503.6 Appendix C, Section 2.6 (Test Methods for Stabilization-Determination of Standing Vegetative Cover) of these rules for standing vegetation cover (i.e.,

vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements.

503.7 Appendix C, Section 2.7 (Test Methods for Stabilization-Rock Test Method) of these rules for a percent cover that is equal to or greater than 10%, for non-erodible elements.

503.8 An alternative test method approved in writing by the Control Officer and the Administrator. Such alternative test method shall meet the requirements in Section 309 of this rule.