



Utah Division of Air Quality Fugitive Dust Control Plans - Instructions

Revised: 2/24/06

The Fugitive Emissions and Fugitive Dust Rule (R307-309) requires a fugitive dust control plan (R307-309-6) from all sources whose activities or equipment have the potential to produce fugitive dust, airborne dust, in **Davis, Salt Lake and Utah counties and Ogden City**. Fugitive dust control plans minimize fugitive dust on-site from pits, yards, storage areas, and areas of operation and to prevent opacities caused by fugitive dust from exceeding **20% on site** and **10% at the property boundary**. The fugitive dust rule addresses storage and handling of aggregate materials, construction and demolition activities on sites greater than 1/4 acre, road ways, mining activities, and tailings piles and ponds. Sources shall develop their dust control plans and submit them to the Executive Secretary **no later than 30 days after the source becomes subject to the R307-309**. Fugitive dust control plans, tailored to specific operations and sites of operation, shall be required for:

1. All operations with material storage, handling and/or hauling operations and areas of source operations, construction sites; and all sources or operations which have the potential to produce fugitive dust in nonattainment areas along the Wasatch Front;
2. All temporary relocation under R307-401-7. Sources will be required to develop site specific dust control plans for each temporary relocation of permitted equipment;
3. All sources and areas of source operations, pits and yards, statewide, which have been issued a Notice of Violation for excess fugitive dust.

Operations, areas of operation and sources that shall be addressed in fugitive dust control plans are:

- material storage/handling
- material handling/transfer
- material processing/transfer
- road ways and yard areas
- loading/hauling/dumping materials
- drilling, blasting, and pushing operations
- clearing/leveling/development construction
- earth moving and excavation
- track out/spillage on paved roads
- exposed surfaces

Detailed Instructions:

Check the box explaining why you are submitting the fugitive dust control plan:

- Fugitive Dust Rule R307-309-6,
- approval order condition/operating permit requirement,
- settlement agreement.

- Line 1:** Fill in the name, address, phone number, and fax number of the business submitting the fugitive dust control plan. Fill in the business contact.
- Line 2:** Fill in the address where the equipment will be located. If not located in a city, include directions to the site: five miles south of Deseret on highway 101, turn west at farmhouse, go 1.5 miles.
- Line 3:** Fill in the project start-up date and the estimated finish date.
- Line 4:** Describe what your business will be doing at the site. The type of business: road building, trenching, aggregate plants, asphalt plants, concrete plants, and other construction sources.
- Line 5:** Describe the control methods you will be using to comply with Fugitive Emissions and Fugitive Dust Rule (R307-309). If you have an approval order (air permit) you should review the minimum requirements described in the approval order to see what minimum requirements are described in your approval order.

Fugitive dust control strategies include, but are not limited to:

- | | | |
|--|--|--------------------|
| - reducing vehicular traffic | - paving/cleaning road ways | - hydro drilling |
| - chemical stabilization | - limiting number of blasts | - covering loads |
| - enclosing/covering operations | - conveyor systems | - wind breaks |
| - planting vegetative cover | - boots on drop points | - mulching |
| - providing synthetic cover | - reduction in height of drop points | - dust collectors |
| - limiting blasts to wet seasons | - limiting number of blasts | - wetting/watering |
| - reducing vehicular speed | - wetting materials before processing | - reducing |
| - cleaning haul trucks before leaving loading area | - limiting pushing operations to wet seasons | |

Sign and date the form.

Submit the Fugitive Dust Control Plan to:

Executive Secretary
Utah Division of Air Quality
POB 144820
150 North 1950 West
Salt Lake City, Utah 84114-4820

Phone: 801-536-4000
Fax: 801-536-4099

R307. Environmental Quality, Air Quality.
R307-309. Nonattainment and Maintenance Area for PM10: Fugitive Emissions and Fugitive Dust.
R307-309-1. Purpose.

This rule establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust listed in Section IX, Part H of the state implementation plan or located in PM10 nonattainment and maintenance areas to meet the reasonably available control measures for PM10 required in section 189(a)(1)(C) of the Act.

R307-309-2. Definitions.

The following addition definition apply to R307-309: "Material" means sand, gravel, soil, minerals or other matter which may create fugitive dust.

R307-309-2. Applicability.

(1) Applicability. R307-309 applies to all sources of fugitive dust and fugitive emissions listed in Section IX, Part H of the state implementation plan or located in a nonattainment or maintenance area for PM10, except as specified in (2) below.

(2) Exemptions.

(a) The provisions of R307-309 do not apply to agricultural or horticultural activities specified in 19-2-114 (1)-(3).

(b) Any activity subject to R307-307 is except from R307-309-7.

(3) Compliance Schedule. Any source located in a new nonattainment area for PM10 is subject to R307-309 180 days after the area is designated nonattainment by the Environmental Protection Agency. Provisions of R307-205 shall continue to apply to the owner or operator of a source during this transition period.

R307-309-4. Fugitive Emissions.

Fugitive emissions from any source shall not exceed 15% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. For intermittent sources and mobile sources, opacity observations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply.

R307-309-5. General Requirements for Fugitive Dust.

(1) Except as provided in (2) below, opacity caused by fugitive dust shall not exceed: (a) 10% at the property boundary; and (b) 20% on site.

(2) Opacity in (1) above shall not apply when the wind speed exceeds 25 miles per hour and the owner or operator is taking appropriate actions to control fugitive dust.

(a) If the source has a fugitive dust control plan approved by the executive secretary, control measures in the plan are considered appropriate.

(b) Wind speed may be measured by a hand-held anemometer or equivalent device.

(3) Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. For intermittent sources and mobile sources, opacity observations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply.

R307-309-6. Fugitive Dust Control Plan.

(1) Any person owning or operating a new or existing source of fugitive dust, including storage, hauling or handling operations or engaging in clearing or leveling of land one-quarter acre or greater in size, earthmoving, excavation, or movement of trucks or construction equipment over cleared land one-quarter acre or greater in size or access haul roads shall submit a plan to control fugitive dust to the executive secretary no later than 30 days after the source becomes subject to R307-309. The plan shall address fugitive dust control strategies for the following operations as applicable:

- (a) Material Storage;
 - (b) Material handling and transfer;
 - (c) Material processing;
 - (d) Road ways and yard areas;
 - (e) Material loading and dumping;
 - (f) Hauling of materials;
 - (g) Drilling, blasting and pushing operations;
 - (h) Clearing and leveling;
 - (i) Earth moving and excavation;
 - (j) Exposed surfaces;
 - (k) Any other source of fugitive dust.
- (2) Strategies to control fugitive dust may include:
- (a) Wetting or watering;
 - (b) Chemical stabilization;
 - (c) Enclosing or covering operations;
 - (d) Planting vegetative cover;
 - (e) Providing synthetic cover;
 - (f) Wind breaks;
 - (g) Reducing vehicular traffic;
 - (h) Reducing vehicular speed;
 - (i) Cleaning haul trucks before leaving loading area;
 - (j) Limiting pushing operations to wet seasons;
 - (k) Paving or cleaning road ways;
 - (l) Covering loads;
 - (m) Conveyor systems;
 - (n) Boots on drop points;
 - (o) Reducing the height of drop areas;
 - (p) Using dust collectors;
 - (q) Reducing production;
 - (r) Mulching;
 - (s) Limiting the number and power of blasts;

- (t) Limiting blasts to non-windy days and wet seasons;
- (u) Hydro drilling;
- (v) Wetting materials before processing;
- (w) Using a cattle guard before entering a paved road;
- (x) Washing haul trucks before leaving the loading site; or
- (y) Terracing.

(3) Each source shall comply with all provisions of the fugitive dust control plan as approved by the executive secretary.

R307-309-7. Storage, Hauling and Handling of Aggregate Materials.

Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-8. Construction and Demolition Activities.

Any person engaging in clearing or leveling of land with an area of one-quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-9. Roads.

(1) Any person responsible for construction or maintenance of any existing road or having right-of-way easement or possessing the right to use the same whose activities result in fugitive dust from the road shall minimize fugitive dust to the maximum extent possible. Any such person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

(2) Unpaved Roads. Any person responsible for construction or maintenance of any new or existing unpaved road shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. Any person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-10. Mining Activities.

(1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-309-10 and not by R307-309-7, 8, 9, and 11.

(2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations.

(3) The fugitive dust control measures to be used may include:

- (a) periodic watering of unpaved roads,
- (b) chemical stabilization of unpaved roads,
- (c) paving of roads,
- (d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface,
- (e) restricting the speed of vehicles in and around the mining operation,
- (f) revegetating, mulching, or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust,
- (g) restricting the travel of vehicles on other than established roads,
- (h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,
- (i) substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,
- (j) minimizing the area of disturbed land,
- (k) prompt revegetation of regraded lands,
- (l) planting of special windbreak vegetation at critical points in the permit area,
- (m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the executive secretary.
- (n) restricting the areas to be blasted at any one time,
- (o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,
- (p) restricting fugitive dust at spoil and coal transfer and loading points,
- (q) control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the executive secretary, or
- (r) other techniques as determined necessary by the executive secretary.

R307-309-10. Tailings Piles and Ponds.

(1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-309-11 and not by R307-309-7, 8, 9, and 10.

(2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls may include:

- (a) watering,
- (b) chemical stabilization,
- (c) synthetic covers,

- (d) vegetative covers,
- (e) wind breaks,
- (f) minimizing the area of disturbed tailings,
- (g) restricting the speed of vehicles in and around the tailings operation, or
- (h) other equivalent methods or techniques which may be approvable by the executive secretary.

KEY: air pollution, dust, PM10
September 7, 2005
19-2-101
19-2-104
19-2-109

R307. Environmental Quality, Air Quality.

R307-205. Emission Standards: Fugitive Emissions and Fugitive Dust.

R307-205-1. Purpose.

R307-205 establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust for sources located in all areas in the state except those listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

R307-205-2. Applicability.

R307-205 applies statewide to all sources of fugitive emissions and fugitive dust, except for agricultural or horticultural activities specified in 19-2-114(1)-(3) and any source listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

R307-205-3. Definitions.

The following definitions apply throughout R307-205: "Material" means sand, gravel, soil, minerals or other matter which may create fugitive dust.

R307-205-4. Fugitive Emissions.

Fugitive emissions from sources which were constructed on or before April 25, 1971, shall not exceed 40% opacity. Fugitive emissions from sources constructed or modified after April 25, 1971, shall not exceed 20% opacity.

R307-205-5. Fugitive Dust.

(1) Storage and Handling of Materials. Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall minimize fugitive dust from such an operation. Such control may include the use of enclosures, covers, stabilization or other equivalent methods or techniques as approved by the executive secretary.

(2) Construction and Demolition Activities.

(a) Any person engaging in clearing or leveling of land greater than one-quarter acre in size, earthmoving, excavation, or movement of trucks or construction

equipment over cleared land greater than one-quarter acre in size or access haul roads shall take steps to minimize fugitive dust from such activities. Such control may include watering and chemical stabilization of potential fugitive dust sources or other equivalent methods or techniques approved by the executive secretary.

(b) The owner or operator of any land area greater than one-quarter acre in size that has been cleared or excavated shall take measures to prevent fugitive particulate matter from becoming airborne. Such measures may include:

- (i) planting vegetative cover,
- (ii) providing synthetic cover,
- (iii) watering,
- (iv) chemical stabilization,
- (v) wind breaks, or
- (vi) other equivalent methods or techniques approved by the executive secretary.

(c) Any person engaging in demolition activities including razing homes, buildings, or other structures or removing paving material from roads or parking areas shall take steps to minimize fugitive dust from such activities. Such control may include watering and chemical stabilization or other equivalent methods or techniques approved by the executive secretary.

R307-205-6. Roads.

(1) The executive secretary may require persons owning, operating or maintaining any new or existing road, or having right-of-way easement or possessory right to use the same to supply traffic count information as determined necessary to ascertain whether or not control techniques are adequate or additional controls are necessary.

(2) Any person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-205-7. Mining Activities.

(1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-205-7 and not by R307-205-5 and 6.

(2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part

of site preparation, mining activities, and reclamation operations.

(3) The fugitive dust control measures to be used may include:

- (a) periodic watering of unpaved roads
- (b) chemical stabilization of unpaved roads,
- (c) paving of roads,
- (d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface,
- (e) restricting the speed of vehicles in and around the mining operation,
- (f) revegetating, mulching, or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust,
- (g) restricting the travel of vehicles on other than established roads,
- (h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,
- (i) substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,
- (j) minimizing the area of disturbed land,
- (k) prompt revegetation of regraded lands,
- (l) planting of special windbreak vegetation at critical points in the permit area,
- (m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the executive secretary.
- (n) restricting the areas to be blasted at any one time,
- (o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,
- (p) restricting fugitive dust at spoil and coal transfer and loading points,
- (q) control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the executive secretary, or
- (r) other techniques as determined necessary by the executive secretary.

(4) Any person owning or operating an existing mining operation in an actual area of nonattainment for particulate or an existing mining operation outside an actual area of nonattainment from which fugitive dust impacts an actual area of nonattainment for particulate shall submit plans for control of fugitive dust from such operations to the executive secretary for approval no later than September 29, 1981, 180 days after the effective date of this regulation.

R307-205-8. Tailings Piles and Ponds.

(1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-205-8 and not by R307-205-5 and 6.

(2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls may include:

- (a) watering,
- (b) chemical stabilization,
- (c) synthetic covers,
- (d) vegetative covers,
- (e) wind breaks,
- (f) minimizing the area of disturbed tailings,
- (g) restricting the speed of vehicles in and around the tailings operation, or
- (h) other equivalent methods or techniques which may be approvable by the executive secretary.

KEY: air pollution, fugitive emissions, mining, tailings

September 7, 2005

19-2-101

19-2-104

19-2-109