

1 **R307. Environmental Quality, Air Quality.**

2 **R307-306. PM10 Nonattainment and Maintenance Areas: Abrasive**  
3 **Blasting.**

4 **R307-306-1. Purpose.**

5 This rule establishes requirements that apply to abrasive  
6 blasting operations in PM10 nonattainment and maintenance areas.

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8 **R307-306-2. Definitions.**

9 The following additional definitions apply to R307-306.

10 "Abrasive Blasting" means the operation of cleaning or  
11 preparing a surface by forcibly propelling a stream of abrasive  
12 material against the surface.

13 "Abrasive Blasting Equipment" means any equipment used in  
14 abrasive blasting operations.

15 "Abrasives" means any material used in abrasive blasting  
16 operations including but not limited to sand, slag, steel shot,  
17 garnet or walnut shells.

18 "Confined Blasting" means any abrasive blasting conducted in  
19 an enclosure that significantly restricts air contaminants from  
20 being emitted to the ambient atmosphere, including but not  
21 limited to shrouds, tanks, drydocks, buildings and structures.

22 "Hydroblasting" means any abrasive blasting using high  
23 pressure liquid as the propelling force.

24 "Multiple Nozzles" means a group of two or more nozzles used  
25 for abrasive cleaning of the same surface in such close proximity  
26 that their separate plumes are indistinguishable.

27 "Unconfined Blasting" means any abrasive blasting that is  
28 not confined blasting as defined above.

29 "Wet Abrasive Blasting" means any abrasive blasting using  
30 compressed air as the propelling force and sufficient water to  
31 minimize the plume.

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33 **R307-306-3. Applicability.**

34 R307-306 applies to any person who operates abrasive  
35 blasting equipment in a PM10 nonattainment or maintenance area,  
36 or to sources listed in Section IX, Part H of the state  
37 implementation plan.

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39 **R307-306-4. Visible Emission Standard.**

40 (1) Except as provided in (2) below, visible emissions from  
41 abrasive blasting operations shall not exceed 20% opacity except  
42 for an aggregate period of three minutes in any one hour.

43 (2) If the abrasive blasting operation complies with the  
44 performance standards in R307-306-6, visible emissions from the  
45 operation shall not exceed 40% opacity, except for an aggregate  
46 period of 3 minutes in any one hour.

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48 **R307-306-5. Visible Emission Evaluation Techniques.**

49 (1) Visible emissions shall be measured using EPA Method 9.  
50 Visible emissions from intermittent sources shall use procedures  
51 similar to Method 9, but the requirement for observations to be  
52 made at 15 second intervals over a six minute period shall not  
53

1 apply.

2 (2) Visible emissions from unconfined blasting shall be  
3 measured at the densest point of the emission after a major  
4 portion of the spent abrasive has fallen out at a point not less  
5 than five feet nor more than twenty-five feet from the impact  
6 surface from any single abrasive blasting nozzle.

7 (3) An unconfined blasting operation that uses multiple  
8 nozzles shall be considered a single source unless it can be  
9 demonstrated by the owner or operator that each nozzle, measured  
10 separately, meets the visible emission standards in R307-306-4.

11 (4) Emissions from confined blasting shall be measured at  
12 the densest point after the air contaminant leaves the enclosure.  
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14 **R307-306-6. Performance Standards.**

15 (1) To satisfy the requirements of R307-306-4(2), the  
16 abrasive blasting operation shall use at least one of the  
17 following performance standards:

- 18 (a) confined blasting;
- 19 (b) wet abrasive blasting;
- 20 (c) hydroblasting; or
- 21 (d) unconfined blasting using abrasives as defined in (2)  
22 below.

23 (2) Abrasives.

24 (a) Abrasives used for dry unconfined blasting referenced  
25 in (1) above shall comply with the following performance  
26 standards:

27 (i) Before blasting, the abrasive shall not contain more  
28 than 1% by weight material passing a #70 U.S. Standard sieve.

29 (ii) After blasting the abrasive shall not contain more  
30 than 1.8% by weight material 5 microns or smaller.

31 (b) Abrasives reused for dry unconfined blasting are exempt  
32 from (a) (ii) above, but must conform with (a) (i) above.

33 (3) Abrasive Certification. Sources using the performance  
34 standard of (1) (d) above to meet the requirements of R307-306-  
35 4(2) must demonstrate they have obtained abrasives from a  
36 supplier who has certified (submitted test results) to the  
37 executive secretary at least annually that such abrasives meet  
38 the requirements of (2) above.  
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40 **R307-306-7. Compliance Schedule.**

41 The provisions of R307-306 shall apply in any new PM10  
42 nonattainment area 180 days after the area is officially  
43 designated a nonattainment area for PM10 by the Environmental  
44 Protection Agency. Provisions of R307-206 shall continue to apply  
45 to the owner or operator of a source during this transition  
46 period.  
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48 **Key: air pollution, abrasive blasting, PM10**  
49 **2005**

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