

State of California  
AIR RESOURCES BOARD

Resolution 84-3

February 24, 1984

Agenda Item No.: 84-4-2

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "Board") to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Sections 41900 through 41905 of the Health and Safety Code provide that the Board shall adopt air pollution standards for sandblasting operations, pursuant to the recommendations of the Abrasive Blasting Advisory Committee (the "Advisory Committee") convened in accordance with the provisions of Section 41900 of the Health and Safety Code;

WHEREAS, Section 39607(d) of the Health and Safety Code authorizes the Board to adopt test procedures to measure compliance with its nonvehicular emissions standards and those of districts;

WHEREAS, in Sections 92000-92520, Title 17, California Administrative Code, (the "Abrasive Blasting regulations"), the Board has adopted standards for sandblasting operations and procedures to measure compliance with those standards, pursuant to the recommendations of the Advisory Committee;

WHEREAS, pursuant to Section 41903 of the Health and Safety Code, the Advisory Committee has reviewed the Abrasive Blasting regulations in light of changes in sandblasting technology, and, pursuant to Section 41902 of the Health and Safety Code, has determined where changes can be made so that the regulations reflect the strictest standards that can be reasonably achieved;

WHEREAS, pursuant to its review, the Advisory Committee has proposed and recommended that the Board adopt new regulations, Sections 92530 and 92540, and amend its current Abrasive Blasting regulations, as set forth in Attachment A hereto;

WHEREAS, the California Environmental Quality Act (CEQA) and Board regulations require that action not be taken as proposed if feasible alternatives or mitigation measures exist which would substantially avoid or reduce any significant environmental impacts of the proposed action;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with Section 11340), Part 1, Division 3, Title 2 of the Government Code; and

WHEREAS, the Board finds that:

The regulatory changes recommended by the Advisory Committee take into account advances in abrasive blasting technology and implement the statutory directive that the standards be the strictest that can be reasonably achieved;

The proposed regulatory changes are expected to reduce the amount of air pollution resulting from abrasive blasting operations;


The proposed change in the distance from which opacity will be read is not expected to affect significantly the number of emissions violations determined and, therefore, will not result in significant adverse environmental impacts; and

The potential adverse air quality impacts that could result from reading opacity at a distance greater than 25 feet will be limited by the requirement that the observer reasonably determine that the greater distance will not significantly affect the reading; and

WHEREAS, the Board has determined, pursuant to the requirements of the California Environmental Quality Act and Air Resources Board regulations, that this regulatory action will not have a significant adverse effect on the environment;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts the amendments to Section 92000-92520, Title 17, California Administrative Code, and adopts new Sections 92530 and 92540, Title 17, California Administrative Code, all as set forth in Attachment A hereto.

I certify that the above is a true and correct copy of Resolution 84-3, as adopted by the Air Resources Board.

  
Harold Holmes, Board Secretary

State of California  
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Amendments to Sections 92000-92520, and the Adoption of Sections 92530 and 92540, Title 17, California Administrative Code, Regarding Abrasive Blasting

Agenda Item No.: 84-4-2

Public Hearing Date: February 24, 1984

Response Date: February 24, 1984

Issuing Authority: Air Resources Board

Comment: The change in the distance from which opacity is read would require that readings be made at a distance of 25 feet. At this distance, dilution of the emissions may bring opacity within regulatory limits without any reduction in the air pollution generated.

Response: Staff believes that the number of violations that will be determined at the twenty-five foot distance will not differ significantly from the number identified under the existing regulation and thus concludes that no significant adverse environmental impact will occur.

CERTIFIED:

  
Board Secretary

Date: 05/31/84

ATTACHMENT A

Amend Section 92000, Title 17, California Administrative Code, to read as follows:

92000. Definitions. For the purposes of this subchapter:

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

(b) "Abrasive blasting" means the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

(c) "Abrasive blasting equipment" means any equipment utilized in abrasive blasting operations.

(d) "Air contaminant" includes smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids or any combination thereof.

(e) "Brushoff blasting" means a method of cleanup performed in order to achieve surface uniformity or impurity removal after wet blasting, hydroblasting, or vacuum blasting operations.

~~(e)~~ (f) "Confined blasting" means any abrasive blasting conducted in an enclosure which significantly restricts air contaminants from being emitted to the ambient atmosphere, including, but not limited to shrouding, tanks, drydocks, buildings, and structures.

(g) "Facility" means any property site at which one or more blasting operations, either confined or unconfined, are carried out or maintained as part of an identifiable business.

~~(f)~~ (h) "Hydroblasting" means any abrasive blasting using high pressure liquid as the propelling force.

~~(g)~~ (i) "Multiple nozzles" means more than one nozzle being used to abrasive blast the same surface in such close proximity that their separate plumes are indistinguishable.

~~(h)~~ (j) "Permanent abrasive blasting operations or equipment" means abrasive blasting operations conducted, or abrasive blasting equipment located, in a building which is used, in whole or in part, for abrasive blasting operations.

~~(i)~~ (k) "Person" means any individual, firm, association, organization, partnership, business trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local governmental agency or public district or any officer or employee thereof. "Person" also means the United States Government or its agencies to the extent authorized by federal law.

~~(j)~~ (l) "Sandblasting" means abrasive blasting.

~~(k)~~ (m) "Source" means the impact surface from any single abrasive blasting nozzle.

(n) "Steel or iron shot/grit" means abrasives which meet either the Society of Automotive Engineers (SAE) recommended practices J827 and J444 or Steel Founders' Society of America Standards 21-68 or 20T-66, as those practices and standards existed on (insert date of adoption of amended regulation).

~~(i)~~ (o) "Unconfined blasting" means any abrasive blasting which does not conform with definitions ~~(e)~~ f or ~~(h)~~ j of this article.

~~(m)~~ (p) "Vacuum blasting" means any abrasive blasting in which the spent abrasive, ~~and~~ surface material, and dust is are immediately collected by a vacuum device.

~~(n)~~ (q) "Wet abrasive blasting" means any abrasive blasting using compressed air as the propelling force, which in the judgment of the air pollution control officer uses an amount of water adequate to minimize the plume.

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 41900, 41902, 41904, and 41905, Health and Safety Code.

Amend Section 92200, Title 17, California Administrative Code, to read as follows:

92200. Visible Emission Standards

(a) No person shall, if he complies with an applicable performance standard in Article -5 4, discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(1) As dark or darker in shade as that designated at No. 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or

(2) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subdivision (a) (1).

(b) No person shall, if he is not complying with an applicable performance standard in Article -5 4, discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(1) As dark or darker in shade as that designated at No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or

(2) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subdivision (b) (1).

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 41900, 41902, 41904, and 41905, Health and Safety Code.

Amend Section 92400, Title 17, California Administrative Code, to read as follows:

92400. Visible Emission Evaluation Techniques

Visible emission evaluation of abrasive blasting operations shall be conducted in accordance with the following provisions:

(a) Emissions shall be read in opacities and recorded in percentages.

(b) The light source should be at the rear of observer during daylight hours.

(c) The light source should be behind the emission during hours of darkness.

(d) Observer position should be at approximately right angles to wind direction and at a distance no less than twice the height of the source but not more than one quarter of a mile from the base of the source.

(e) Emissions from unconfined blasting shall be read at the densest point of the emission after a major portion of the spent abrasive has fallen out, at a point ~~not less than five feet nor more than~~ twenty five feet from the source; provided, however, that emissions may be read from a greater distance, if the observer reasonably determines that the greater distance will not significantly affect the reading.

(f) Where the presence of uncombined water is the only reason for a failure to meet the limitations of Subsection 92200, that Subsection shall not apply. The burden of proof which establishes that Subsection 92200 should not apply shall be upon the person seeking to come within its provisions.

(g) Emissions from unconfined blasting employing multiple nozzles shall be judged as a single source unless it can be demonstrated by the owner or operator that each nozzle, evaluated separately, meets the emission and performance standards provided for in this subchapter. The owner or operator shall be offered the opportunity to make such a demonstration.

(h) Emissions from confined blasting shall be read at the densest point after the air contaminant leaves the enclosure.

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 41900, 41902, 41904, and 41905, Health and Safety Code.

Amend Section 92500, Title 17, California Administrative Code, to read as follows:

92500. General Provisions.

Any abrasive blasting operation except as provided for in Sections 92510, 92530, and 92540 shall comply with at least one of the following performance standards:



- (a) Confined blasting shall be used;
- (b) Wet abrasive blasting shall be used;
- (c) Hydroblasting shall be used; or
- (d) Dry unconfined blasting shall use abrasives as defined in

Section 92520.

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 41900, 41902, 41904, and 41905, Health and Safety Code.

Amend Section 92520, Title 17, California Administrative Code, to read as follows:

92520. Abrasives.

(a) Except as provided in (c), all abrasives used for dry unconfined blasting shall comply with the following performance standards:

(1) Before blasting the abrasive shall not contain more than 1 percent by weight material passing a #70 U.S. Standard sieve when tested in accordance with "Method of Test for Abrasive Media Evaluation," Test Method No. California 371-A.

(2) After blasting the abrasive shall not contain more than 1.8 percent by weight material five micron or smaller when tested in accordance with "Method of Test for Abrasive Media Evaluation," Test Method No. California 371-A.

(b) No person shall conduct dry unconfined blasting unless the abrasive(s) used in such operation have been certified by the Air Resources Board, on at least an annual basis, to comply with the performance standards set forth in (a) above. Any person who desires certification of an abrasive shall furnish to the Air Resources Board an adequate test sample, together

with fees to defray the cost of testing. The Air Resources Board shall maintain an up-to-date list of certified abrasives.

(c) Certified abrasives reused for dry unconfined blasting are exempt from (a)(2) above, but must conform with (a)(1) above.

(d) A blend of certified abrasives shall be considered certified for purposes of Section 92520(b), unless found not to meet the requirements of Section 92520(a) pursuant to testing initiated by the Air Resources Board.

~~(d)~~ (e) All manufacturers and suppliers of abrasives certified for dry unconfined abrasive blasting shall legibly and permanently label the invoice, bill of lading and abrasive packaging or container with the following statement:

"ARB certified for dry unconfined blasting."

This subsection shall be effective through (insert date 89 days after filing of amendments with Secretary of State).

~~(e) The provisions of this section shall become effective on May 1, 1976.~~

(f) All manufacturers and suppliers of abrasives certified for dry unconfined abrasive blasting shall legibly and permanently label the invoice, bill of lading and abrasive packaging or container with each of the following:

(1) The manufacturer's name or identification trade name;

(2) The grade, weight proportion, and brand name of the abrasive or of the abrasive blend; and

(3) The statement "ARB certified for dry unconfined blasting."

This subsection shall become effective on (insert date 90 days after filing of the amendments with Secretary of State).

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code.  
Reference: Sections 41900, 41902, 41904, and 41905, Health and Safety Code.

Adopt Section 92530, Title 17, California Administrative Code to read as follows:

92530. Facility Blasting Operations

(a) Confined blasting shall be used for all abrasive blasting operations at an abrasive blasting facility except under the following conditions:

- (1) When steel or iron shot/grit is used;
- (2) When the item to be blasted exceeds 8 feet in height, 8 feet in width, or 10 feet in length; or
- (3) When the structure or surface is blasted at its permanent or ordinary location.

(b) The provisions of this section shall become effective on (insert date eighteen months after the date of adoption).

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 41900, 41902, 41904, and 41905, Health and Safety Code.

Adopt Section 92540, Title 17, California Administrative Code, to read as follows:

92540. Stucco and Concrete

Abrasive blasting of stucco and concrete shall be performed by wet blasting, hydroblasting, or vacuum blasting with the following exceptions:

Dry blasting may be used for:

- (1) Window and door returns and frames;
- (2) Eaves, overhangs and ceilings;

(3) Brush off blasting except for stucco surfaces;

(4) Completely shrouded structures and blast areas that effectively control emissions;

(5) Abrasive cleaning operations other than aggregate exposure or paint removal related to new concrete construction or repair activity if such operations are performed onsite.

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 41900, 41902, 41904, and 41905, Health and Safety Code.

# Memorandum

To : Gordon Van Vleck  
Secretary  
Resources Agency

Date : April 5, 1984

Subject: Filing of Notice of  
Decisions of the Air  
Resources Board

  
Harold Holmes  
Board Secretary

From : Air Resources Board

Pursuant to Title 17, Section 60007 (b), and in compliance with Air Resources Board certification under section 21080.5 of the Public Resources Code, the Air Resources Board hereby forwards for posting the attached notice of decision and response to environmental comments raised during the comment period.

## ATTACHMENTS

84-2

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