



Form 400-E-4b

Abrasive Blasting Equipment (Other Than Portable/Open)

Mail To: SCAQMD P.O. Box 4944 Diamond Bar, CA 91765-0944



This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Tel: (909) 396-3385 www.aqmd.gov

Section A - Operator Information

Facility Name (Business Name of Operator That Appears On Permit): Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):
Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): Fixed Location Various Locations

Section B - Equipment Description (Select ONLY one type of equipment)

Abrasive Blasting Room

Blasting Room: Manufacturer, Model No., Room Size (Length, Width, Height), Number of Air Port, Dimensions of Air Ports, Capacity of Pot, Equipped with man door?, Exhaust Blower Flow Rate.
Nozzles: Number of Nozzles, Maximum Inner Diameter.
Compressor: Plant Air, Air Flow Rate.

Abrasive Blasting Machine

Blasting Machine: Manufacturer, Model No., Dimensions (Length, Width, Height), Wheel impeller Horsepower, Capacity of Pot, Exhaust Blower Flow Rate, Material Flow Rate.

Abrasive Blasting Cabinet

Blasting Cabinet: Manufacturer, Model No., Dimensions (Length, Width, Height), Control, Number of Baffled Air Ports, Exhaust Blower Flow Rate.
Nozzles: Number of Nozzles, Maximum Inner Diameter.
Compressor: Plant Air, Air Flow Rate.

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Section C - Process Description	
Blasting Type	Dry Blasting      Wet _____ % of time      Hydro-Blasting _____ % of time
Abrasive Used	Material Type:      Sand      Grit      Shot      Plastic Media      Other _____ Material Name: _____ Density: _____ lb/ft <sup>3</sup> Material Flow Rate (if known): _____ lbs/hour
Items To Be Blasted	Description: _____
Operating Schedule	Normal:      _____ hours/day      _____ days/week      _____ weeks/yr Maximum:      _____ hours/day      _____ days/week      _____ weeks/yr
Control	Is the room vented to an external air pollution control device?      Yes      No If Yes, a separate application (Form 400A and E-1) needs to be filed for the control equipment.
Section D - Authorization/Signature	
I hereby certify that all information contained herein and information submitted with this application is true and correct.	
Preparer Info	Signature: _____ Date: _____ Name: _____ Phone #: _____ Fax #: _____ Title: _____ Company Name: _____ Email: _____
	Name: _____ Phone #: _____ Fax #: _____ Title: _____ Company Name: _____ Email: _____

THIS IS A PUBLIC DOCUMENT

Pursuant to the California Public Records Act, your permit application and any supplemental documentation are public records and may be disclosed to a third party. If you wish to claim certain limited information as exempt from disclosure because it qualifies as a trade secret, as defined in the District's Guidelines for Implementing the California Public Records Act, you must make such claim at the time of submittal to the District.

Check here if you claim that this form or its attachments contain confidential trade secret information.

<b>Abrasive Flow Rate (FR)</b>	
FR <sub>1</sub> = _____	
ID = _____	
ID <sub>1</sub> = _____	FR = FR <sub>1</sub> x (ID/ID <sub>1</sub> ) x $\sqrt[3]{\frac{f}{f_1}}$ FR = _____ x ( _____ in <sup>2</sup> ÷ _____ in <sup>2</sup> ) x ( _____ lb/ft <sup>3</sup> ÷ _____ lb/ft <sup>3</sup> ) = _____
$f_1$ = _____	
$f$ = _____	

<b>Machine Emissions</b>							
R <sub>1,PM</sub> = _____ x _____ HP x 1 - ( _____ /200) = _____ lb/hr x ( _____ hrs/day) = _____ lb/day	<table style="width: 100%; border: none;"> <tr> <td style="width: 40%; border: none;">Uncontrolled PM Emissions (R<sub>1</sub>)</td> <td style="width: 30%; border: none; text-align: center;">Max lb/hr</td> <td style="width: 30%; border: none; text-align: center;">Max lb/day</td> </tr> <tr> <td style="border: none;">_____</td> <td style="border: none;">_____</td> <td style="border: none;">_____</td> </tr> </table>	Uncontrolled PM Emissions (R <sub>1</sub> )	Max lb/hr	Max lb/day	_____	_____	_____
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_____	_____	_____					
R <sub>2,PM</sub> = R <sub>1,PM</sub> _____ x (1-.98) = _____	<table style="width: 100%; border: none;"> <tr> <td style="width: 40%; border: none;">Controlled PM Emissions (R<sub>2</sub>)</td> <td style="width: 30%; border: none; text-align: center;">Max lb/hr</td> <td style="width: 30%; border: none; text-align: center;">Max lb/day</td> </tr> <tr> <td style="border: none;">_____</td> <td style="border: none;">_____</td> <td style="border: none;">_____</td> </tr> </table>	Controlled PM Emissions (R <sub>2</sub> )	Max lb/hr	Max lb/day	_____	_____	_____
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_____	_____	_____					

<b>Room or Cabinet Emissions</b>							
R <sub>1,PM</sub> = _____ EF x _____ FR x 1 - ( _____ /200) = _____ lb/hr x ( _____ hrs/day) = _____ lb/day	<table style="width: 100%; border: none;"> <tr> <td style="width: 40%; border: none;">Uncontrolled PM Emissions (R<sub>1</sub>)</td> <td style="width: 30%; border: none; text-align: center;">Max lb/hr</td> <td style="width: 30%; border: none; text-align: center;">Max lb/day</td> </tr> <tr> <td style="border: none;">_____</td> <td style="border: none;">_____</td> <td style="border: none;">_____</td> </tr> </table>	Uncontrolled PM Emissions (R <sub>1</sub> )	Max lb/hr	Max lb/day	_____	_____	_____
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_____	_____	_____					

<b>Exhaust Gas Total Particulate Concentration (PC)</b>	
PC = _____ lb PM/hr (Max) x 7,000 grains/lb	_____ grains/dscf
_____ ft <sup>3</sup> /min x 60 min/hr	_____

<b>Room Cross Draft Velocity (V<sub>c</sub>)</b>	
V <sub>c</sub> = VFR/W x H = _____ CFM / _____ ft x _____ ft = _____ FPM	

<b>Air Inlet Port Velocity (V<sub>i</sub>)</b>	
V <sub>i</sub> = VFR/W x L = _____ CFM / _____ ft <sup>2</sup> = _____ FPM	

<b>Cabinet Air Changes Per Minute (CAC)</b>	
CAC = VFR/W x L x H = _____ CFM / _____ ft <sup>3</sup> = _____ FPM	

<b>Abrasive Blasting Cabinets</b>				
<u>Item</u>	<u>Required</u>	<u>Actual</u>	<u>Compliance</u>	
a. Air Changes Per Minute	10-20	_____	Yes	No
b. Baffled Air Inlet Ports	Yes	_____	Yes	No

<b>Abrasive Blasting Room Guidelines Review</b>				
<u>Item</u>	<u>Required</u>	<u>Actual</u>	<u>Compliance</u>	
a. Crossdraft/Downdraft Velocity (FPM)				
Silica Type Abrasive	80	_____	Yes	No
Non-Silica Type Abrasive	50	_____	Yes	No
b. Air Port Opposite Exhaust Duct	Yes	_____	Yes	No
c. Indraft Velocity (FPM)	500	_____	Yes	No