

**SMAQMD BACT CLEARINGHOUSE**

CATEGORY:

**MISCELLANEOUS**

BACT Size: Minor Source BACT

**GRINDER**

<b>BACT Determination Number:</b> 91	<b>BACT Determination Date:</b> 11/20/2014
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**Equipment Information**

**Permit Number:** N/A -- Generic BACT Determination  
**Equipment Description:** GRINDER  
**Unit Size/Rating/Capacity:** Road Asphalt Grinder  
**Equipment Location:**

**BACT Determination Information**

<b>ROCs</b>	<b>Standard:</b>	
	<b>Technology Description:</b>	Compliance with IC engine BACT standard for Engine operations
	<b>Basis:</b>	Achieved in Practice
<b>NOx</b>	<b>Standard:</b>	
	<b>Technology Description:</b>	Compliance with IC engine BACT standard for Engine operations
	<b>Basis:</b>	Achieved in Practice
<b>SOx</b>	<b>Standard:</b>	
	<b>Technology Description:</b>	Compliance with IC engine BACT standard for Engine operations
	<b>Basis:</b>	Achieved in Practice
<b>PM10</b>	<b>Standard:</b>	
	<b>Technology Description:</b>	Compliance with IC engine BACT standard for Engine operations Baghouse venting crushing, enclosures of equipment and water spray at transfer points
	<b>Basis:</b>	Achieved in Practice
<b>PM2.5</b>	<b>Standard:</b>	
	<b>Technology Description:</b>	Compliance with IC engine BACT standard for Engine operations Baghouse venting crushing, enclosures of equipment and water spray at transfer points
	<b>Basis:</b>	Achieved in Practice
<b>CO</b>	<b>Standard:</b>	
	<b>Technology Description:</b>	Compliance with IC engine BACT standard for Engine operations
	<b>Basis:</b>	Achieved in Practice
<b>LEAD</b>	<b>Standard:</b>	
	<b>Technology Description:</b>	
	<b>Basis:</b>	

**Comments:** This is a generic BACT determination based on BACT determinations made, and published, by other air agencies in California and/or other States.

**District Contact:** Venk Reddy Phone No.: (916) 874 - 4861 email: vreddy@airquality.org



## BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION

**DETERMINATION NO.:** 91  
**DATE:** November 14, 2014  
**ENGINEER:** Venk Reddy

**Category/General Equip Description:** Miscellaneous  
**Equipment Specific Description:** Road Asphalt Grinder  
**Equipment Size/Rating:** Minor Source BACT  
**Previous BACT Det. No.:** \_\_\_\_\_

BACT was determined in this process by the evaluation of SMAQMD application 23708

### BACT ANALYSIS

#### Step 1: Identify All Control Technologies

The following control technologies are currently employed as BACT for Road Asphalt Grinder by the following air pollution control districts:

District	(A)	Best Available Control Technology (BACT)
SMAQMD	AP	Engine compliant with engine BACT standards
	AP	Water Spray
South Coast AQMD	AP	Baghouse Venting Jaw Crushers, Cone Crushers, and Material Transfer Points Adjacent to and after these Items; and Water Sprays at Other Material Transfer Points (1990)
San Diego County APCD	TF	Charged fog sprays
	AP	<0.014 grains/dscf
	AP	Covered screen, covered crusher, covered transfer point vented to insertable or central fabric filter
	AP	Covered Screen, covered crusher, or covered transfer point with water spray system and surfactant added

District	(A)	Best Available Control Technology (BACT)
	AP	Water spray system with surfactant
	AP	Water spray system
Bay Area AQMD	AP	Enclosure of jaw/cone crushers, screens, and associated material transfer points and vent to baghouse(s) w/ $\leq 0.01$ gr/dscf; Water spray of other transfer points, conveyors, storage piles, and site road surfaces
San Joaquin Valley APCD	AP	A BACT standard has not been established.

(A) AP = Achieved in Practice, TF = Technologically Feasible

**Step 2: Eliminate Technologically Infeasible Options**

All identified technologies are feasible.

**Step 3: Rank Remaining Control Technologies by Control Effectiveness**

Engine

1. Compliant with established IC engine BACT Standards

Crushing emissions

1. Baghouse venting crushing, enclosures of equipment and Water Spray at transfer points
2. Covered Screen, covered crusher, or covered transfer point with water spray system and surfactant added
3. Water spray system with surfactant
4. Water spray system

**Step 4: Select BACT**

Crushing Emissions

1. PM10/PM2.5/ Lead Baghouse venting crushing, enclosures of equipment and Water Spray at transfer points

Engine

2. Compliant with established IC engine BACT Standards

REVIEWED BY: Ben F. Hall DATE: 11-26-14

APPROVED BY: [Signature] DATE: 12/16/14