

SMAQMD BACT CLEARINGHOUSE

CATEGORY:

MISCELLANEOUS

BACT Size: SMALL EMITTER (<10 LB/DAY) AND MIN

GRINDER

BACT Determination Number: 96	BACT Determination Date: 12/1/2014
--------------------------------------	---

Equipment Information

Permit Number: N/A -- Generic BACT Determination
Equipment Description: GRINDER
Unit Size/Rating/Capacity: Portable Greenwaste Grinder
Equipment Location:

BACT Determination Information

ROCs	Standard:	
	Technology Description:	
	Basis:	
NOx	Standard:	
	Technology Description:	
	Basis:	
SOx	Standard:	
	Technology Description:	
	Basis:	
PM10	Standard:	VEE < or equal to 5% Opacity
	Technology Description:	Water spray or adequate moisture content of process materials
	Basis:	Achieved in Practice
PM2.5	Standard:	VEE < or equal to 5% Opacity
	Technology Description:	Water spray or adequate moisture content of process materials
	Basis:	Achieved in Practice
CO	Standard:	
	Technology Description:	
	Basis:	
LEAD	Standard:	
	Technology Description:	
	Basis:	

Comments: All PM10 is assumed to be PM2.5.

District Contact: Michelle Joe Phone No.: (916) 874 - 4853 email: mjoe@airquality.org



BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION

DETERMINATION NO.: 96
DATE: December 1, 2014
ENGINEER: Michelle Joe

Category/General Equip Description: Miscellaneous
Equipment Specific Description: Portable Greenwaste Grinder
Equipment Size/Rating: Small Emitter (< 10 lb/day) and Minor Source BACT
Previous BACT Det. No.: 82

This BACT determination will update BACT determination no. 82 for Miscellaneous – Portable Greenwaste Grinder which was made on September 17, 2014. This category of material handling operations involves the grinding of greenwaste (i.e., trees, woodwaste, etc.) by a portable nonroad diesel engine.

BACT ANALYSIS

Step 1: Identify All Control Technologies

The following control technologies are currently employed as BACT for Miscellaneous – Portable Greenwaste Grinder by the following BACT Clearinghouses:

BACT Clearinghouse	(A)	Best Available Control Technology (BACT)
SMAQMD	AP	<u>For PM10 & PM2.5 from Greenwaste Grinder:</u> Water sprays with visible emissions not greater than 5%.
EPA RBLC	---	<u>For PM10 from Greenwaste Grinder:</u> A BACT standard has not been established.
CARB	---	<u>For PM10 from Greenwaste Grinder:</u> A BACT standard has not been established.
South Coast AQMD	---	<u>For PM10 from Greenwaste Grinder:</u> A BACT standard has not been established.
Bay Area AQMD	---	<u>For PM10 from Greenwaste Grinder:</u> A BACT standard has not been established.

BACT Clearinghouse	(A)	Best Available Control Technology (BACT)
San Joaquin Valley APCD	AP	<u>For PM10 from Greenwaste Grinder:</u> Use of a water sprinkler system or maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity.

- (A) AP = Achieved in Practice, TF = Technologically Feasible
 (B) Emissions limit was not specified because a limit that applies to all equipment within the category is not possible. Refer to discussion (below).

The following control technologies have been identified:

Note: for the purposes of this BACT determination, the control technologies for PM10 and PM2.5 are considered similar and will be evaluated together.

For PM10 & PM2.5 from Greenwaste Grinder:

1. Water spray/sprinkler system to prevent visible emissions in excess of 5% opacity.
2. Maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity.

Step 2: Eliminate Technologically Infeasible Options

All identified technologies are feasible.

Step 3: Rank Remaining Control Technologies by Control Effectiveness

For PM10 & PM2.5 from Greenwaste Grinder:

1. Water spray/sprinkler system to prevent visible emissions in excess of 5% opacity.
2. Maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity.

Both controls listed are equally effective at preventing visible emissions in excess of 5% opacity, and therefore will be required as BACT for fugitive emissions from greenwaste grinding operations.

For the portable nonroad diesel engine driving the grinder, the SMAQMD is precluded by the Clean Air Act (42 USC 7543, Section 209) from requiring emission standards that are more stringent than the federal standards in effect at the time of manufacture.

Step 4: Select BACT

BACT for the control of PM10 & PM2.5 for Miscellaneous – Portable Greenwaste Grinder is a water spray/sprinkler system or maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity.

BACT Determination
Material Handling – Portable Greenwaste Grinder
December 1, 2014
Page 3 of 3

REVIEWED BY: Ben F. Van DATE: 12-1-14

APPROVED BY: [Signature] DATE: 12/15/14