

SMAQMD BACT CLEARINGHOUSE

ACTIVE

CATEGORY Type:

PORTABLE GRINDER

BACT Category: MINOR SOURCE

BACT Determination Number:	316	BACT Determination Date:	1/22/2024
Equipment Information			
Permit Number:	N/A -- Generic BACT Determination		
Equipment Description:	PORTABLE WOOD WASTE/GREEN WASTE GRINDER		
Unit Size/Rating/Capacity:	ALL		
Equipment Location:			
BACT Determination Information			
District Contact: Felix Trujillo Jr. Phone No.: (279) 207-1154 email: ftrujillo@airquality.org			
ROCs	Standard:		
	Technology Description:	Greenwaste with a moisture content of 30% or more must not remain at the site for longer than 48 hours after it has been ground, except for composting operations and ground material used as a biomass fuel, provided that the temperature is maintained below 122 degrees Fahrenheit or the	
	Basis:	Achieved in Practice	
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: This is a generic BACT determination based on BACT determinations made, and published, by other air agencies in California and/or other States.			

**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION**

DETERMINATION NO.:	<u>316</u>
DATE:	<u>1/22/24</u>
ENGINEER:	<u>Felix Trujillo, Jr.</u>

Category/General Equip Description: Grinder

Equipment Specific Description: Portable Woodwaste/Greenwaste Grinder

Equipment Size/Rating: Minor Source BACT

Previous BACT Det. No.: 258

This BACT determination will update Determination #258 (3/31/20) for portable woodwaste/greenwaste grinders.

In general, portable woodwaste/greenwaste grinders consist of two types of grinders; horizontal and tub grinders. The main difference being the tub grinder is directly fed by the loader. Whereas the horizontal grinder is fed by a feed conveyor that is loaded by a loader. A loader with a grapple/claw attachment feeds both types of grinders. Both grinders include a discharge conveyor that transfers the ground material into the finished stockpile.

BACT ANALYSIS

Pursuant to the District's BACT Guidelines (2016), a review of the EPA, CARB, SCAQMD, SJVAPCD, BAAQMD and SDAPCD BACT Clearinghouses was performed. The District also reviewed any applicable rules from the aforementioned air districts that apply to this type of operation. The review of these sources showed no change in the rules or BACTs that were previously evaluated for minor sources under BACT Nos. 166 and 258. Therefore, there is no change in requirements as was previously determined under BACT Nos. 166 and 258. BACT Nos. 166 and 258 (Appendix A) will be attached as a reference for this BACT determination (see Attachment A). A correction to the Achieved in Practice analysis for SCAQMD section will be made here to clarify the changes made by BACT 258.

A. ACHIEVED IN PRACTICE (Rule 202, §205.1a):

No change in the achieved in practice BACTs were identified since the BACT #166 was analyzed in 2017. However, this analysis will clarify the SCAQMD Rule 1133.1 analysis.

The following control technologies are currently employed as BACT for portable woodwaste

grinding (i.e. tub grinders, horizontal grinders) operations:

South Coast AQMD

BACT

Source: [SCAQMD BACT Guidelines for Non-Major Polluting Facilities, page 13.](#)

Portable Woodwaste/Greenwaste Grinder	
VOC	No standard
NOx	No standard
SOx	No standard
PM10	No standard
PM2.5	No standard
CO	No standard

RULE REQUIREMENTS:

[SCAQMD Rule 1133.1 Chipping and Grinding Activities \(7/8/11\)](#)

The purpose of this rule is to prevent inadvertent decomposition occurring during chipping and grinding activities, excluding materials ground for composting operations. Section (d)(2) requires the operator of a chipping and grinding activity to chip and grind and utilize on site or remove curbside, non-curbside or mixed greenwaste from the site within 48 hours of receipt. The purpose of this rule is to reduce VOC emissions. Pursuant to the Proposed Amended Rule 1133.1 – Chipping and Grinding Activities (6/11) Staff Report, page 12, once greenwaste materials are chipped or ground, air emissions begin to occur immediately and spike within 3 to 7 days of being chipped or ground. This rule has not been amended since the determinations for BACTs 166 and 258. This rule includes exemptions that are applicable to this new BACT and may not have been addressed in the previous BACT determinations. Section (f)(3) exempts ground greenwaste from the requirements of Section (d)(2) provided the moisture contents is less than 30%. Section (4) also exempts material used as biomass fuel from the requirements of Section (d)(2) provided the material temperature is maintained at below 122 degrees Fahrenheit or the moisture content is less than 30%. Therefore, this new BACT will clarify that it does not apply to composting operations or ground material used as biomass fuel with temperatures less than 122 degrees Fahrenheit or with a moisture content of less than 30%.

B. TECHNOLOGICALLY FEASIBLE AND COST EFFECTIVE:

No change in the technologically feasible alternatives were identified since the BACT #166 was analyzed in 2017.

C. SELECTION OF BACT:

Based on the above analysis, BACT for VOC, NOx, SOx, PM10, PM2.5 and CO will be the most stringent standards of what is currently achieved in practice.

BACT FOR PORTABLE WOODWASTE/GREENWASTE GRINDER		
Pollutant	Standard	Source
VOC	Greenwaste with a moisture content of 30% or more must not remain at the site for longer than 48 hours after it has been ground, except for composting operations and ground material used as a biomass fuel, provided that the temperature is maintained below 122 degrees Fahrenheit or the moisture content is less than 30%.	SCAQMD
NOx	No Standard	
SOx	No Standard	
PM10	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SMAQMD, SJVAPCD
PM2.5	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SMAQMD, SJVAPCD
CO	No Standard	

APPROVED BY: Brian F Krebs DATE: 01-22-2024

Attachment A

BACT No. 258

CATEGORY Type:

GRINDER

BACT Category: MINOR SOURCE

BACT Determination Number:	258	BACT Determination Date:	3/31/2020
Equipment Information			
Permit Number: N/A -- Generic BACT Determination Equipment Description: PORTABLE WOODWASTE/GREENWASTE GRINDER Unit Size/Rating/Capacity: ALL Equipment Location:			
BACT Determination Information			
District Contact: Felix Trujillo, Jr. Phone No.: (916) 874-7357 email: ftrujillo@airquality.org			
ROCs	Standard:		
	Technology Description:	Green waste with a moisture content of 30% or more must not remain at the site for longer than 48 hours after it has been ground	
	Basis:	Achieved in Practice	
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: This is a generic BACT determination based on BACT determinations made, and published, by other air agencies in California and/or other States.			

**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION****DETERMINATION NO.:** 258**DATE:** 3/31/20**ENGINEER:** Felix Trujillo, Jr.**Category/General Equip Description:** Grinder**Equipment Specific Description:** Portable Woodwaste/Greenwaste Grinder**Equipment Size/Rating:** Minor Source BACT**Previous BACT Det. No.:** 166

This BACT determination will update Determination #166 (9/12/17) for portable woodwaste/greenwaste grinders.

BACT ANALYSIS

Pursuant to the District's BACT Guidelines (2016), a review of the EPA, CARB, SCAQMD, SJVAPCD, BAAQMD and SDAPCD BACT Clearinghouses was performed. The District also reviewed any applicable rules from the aforementioned air districts that apply to this type of operation. The review of these sources showed no change in the rules or BACTs that were previously evaluated for minor sources under BACT No. 166. Therefore, there is no change in requirements as was previously determined under BACT No. 166. BACT No. 166 (Appendix A) will be attached as a reference for this BACT determination (see Attachment A).

This BACT will clarify that it applies to woodwaste and greenwaste grinding. The reason for this differentiating is because SCAQMD's Chipping and Grinding Rule (1133.1) only requires green waste with a moisture content greater than or equal to 30% moisture to be removed with 48 hours after been ground from the facility. Greenwaste is any organic waste material generated from gardening, agriculture, or landscaping activities including, but not limited to, grass clippings, leaves, tree and shrub trimmings, and plant remains.

C. SELECTION OF BACT:

BACT FOR PORTABLE WOODWASTE/GREENWASTE GRINDER		
Pollutant	Standard	Source
VOC	Greenwaste with a moisture content of 30% or more must not remain at the site for longer than 48 hours after it has been ground	SCAQMD
NOx	No Standard	
SOx	No Standard	
PM10	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SMAQMD, SJVAPCD
PM2.5	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SMAQMD, SJVAPCD
CO	No Standard	

APPROVED BY: Brian F Krebs **DATE:** 3/31/20

Attachment A

BACT No. 166

CATEGORY:

IC ENGINE COMPRESSION-PRIME

BACT Size: Minor Source BACT

IC ENGINE PRIME POWER

BACT Determination Number:	166	BACT Determination Date:	9/12/2017
Equipment Information			
Permit Number:	25331		
Equipment Description:	IC ENGINE PRIME POWER		
Unit Size/Rating/Capacity:	Portable Greenwaste Grinder		
Equipment Location:	ZANKER ROAD RESOURCE MGMT, LTD DBA FLORIN PERKINS 4201 FLORIN PERKINS RD SACRAMENTO, CA		
BACT Determination Information			
ROCs	Standard:		
	Technology Description:	The wood waste must not remain at the site for longer than 48 hours after is has been ground	
	Basis:	Achieved in Practice	
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: Minor Source/Small Emitter BACT (< 10 lb/day)			
District Contact: Felix Trujillo, Jr. Phone No.: (916) 874 - 7357 email: smosunic@airquality.org			



BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION

DETERMINATION

NO.:	166
DATE:	9/12/17
ENGINEER:	Felix Trujillo, Jr.

Category/General Equip

Description: Grinder

Equipment Specific Description: Portable Greenwaste Grinder

Equipment Size/Rating: Small Emitter BACT (< 10 lb/day)/Minor Source

Previous BACT Det. No.: 96

This BACT was determined under the project for A/C's 25331 and 25332 (Zanker Road Resource Management, Ltd.).

BACT ANALYSIS

A: ACHIEVED IN PRACTICE (Rule 202, §205.1a)

The following control technologies are currently employed as BACT for portable woodwaste grinding (i.e. tub grinders, horizontal grinders) operations:

District/Agency	Best Available Control Technology (BACT)/Requirements
US EPA	<u>BACT</u>
	Source: EPA RACT/BACT/LAER Clearinghouse
	Portable Greenwaste Grinder
	VOC No standard
	NOx No standard
	SOx No standard
	PM10 No standard
	PM2.5 No standard
	CO No standard
	<u>RULE REQUIREMENTS:</u>
	None

District/Agency	Best Available Control Technology (BACT)/Requirements														
ARB	<p><u>BACT</u> Source: ARB BACT Clearinghouse</p> <table border="1" data-bbox="423 432 1430 730"> <tr> <td colspan="2">Portable Greenwaste Grinder</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>No standard</td></tr> <tr> <td>PM2.5</td><td>No standard</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p><u>RULE REQUIREMENTS:</u> Regulation to Establish a Statewide Portable Equipment Registration Program (Title 13, CCR, Article 5 Sections 2450-2465) sets the following requirements for portable grinders registered in the PERP program.</p> <ol style="list-style-type: none"> 1. There shall be no visible emissions beyond the property line on which the equipment is being operated; 2. No air contaminants shall be discharged into the atmosphere for a period of periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann 1 or equivalent 20 percent opacity; and 3. Water suppression or chemical palliatives shall be used to control fugitive particulate emissions from the tub grinder whenever the tub grinder is in operation, unless there are no visible emissions. 	Portable Greenwaste Grinder		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
Portable Greenwaste Grinder															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	No standard														
PM2.5	No standard														
CO	No standard														
SMAQMD	<p><u>BACT</u> Source: SMAQMD BACT Clearinghouse; BACT #96</p> <table border="1" data-bbox="423 1268 1430 1713"> <tr> <td colspan="2">Portable Greenwaste Grinder</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials</td></tr> <tr> <td>PM2.5</td><td>VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p><u>RULE REQUIREMENTS:</u> None</p>	Portable Greenwaste Grinder		VOC	No standard	NOx	No standard	SOx	No standard	PM10	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	PM2.5	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	CO	No standard
Portable Greenwaste Grinder															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials														
PM2.5	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials														
CO	No standard														

District/Agency	Best Available Control Technology (BACT)/Requirements														
South Coast AQMD	<p>BACT Source: SCAQMD BACT Guidelines for Non-Major Polluting Facilities, page 13.</p> <table border="1" data-bbox="423 432 1425 743"> <tr> <td colspan="2">Portable Greenwaste Grinder</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>No standard</td></tr> <tr> <td>PM2.5</td><td>No standard</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p>RULE REQUIREMENTS: SCAQMD Rule 1133.1 Chipping and Grinding Activities (7/8/11)</p> <p>The purpose of this rule is to prevent inadvertent decomposition occurring during chipping and grinding activities, including stockpile operations. Section (d)(2) requires the operator of a chipping and grinding activity to chip and grind and utilize on site or remove curbside, non-curbside or mixed greenwaste from the site within 48 hours of receipt. The purpose of this rule is to reduce VOC emissions. Pursuant to the Proposed Amended Rule 1133.1 – Chipping and Grinding Activities (6/11) Staff Report, page 12, once greenwaste materials are chipped or ground, air emissions begin to occur immediately and spike within 3 to 7 days of being chipped or ground. The facility does not accept food waste or yard trimmings (as listed on their website http://www.zankerrecycling.com/florin-perkins/recycling-services/materials-not-accepted/), which decompose at a higher rate than non-curbside greenwaste. The facility does not compost at the site. The facility proposes to store the stockpiles up to 48 hours prior to removal from off-site. Therefore, it is assumed that VOC emissions are negligible and would not trigger BACT requirements.</p>	Portable Greenwaste Grinder		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
Portable Greenwaste Grinder															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	No standard														
PM2.5	No standard														
CO	No standard														
San Diego County APCD	<p>BACT Source: NSR Requirements for BACT, page 27.</p> <table border="1" data-bbox="423 1451 1425 1732"> <tr> <td colspan="2">Portable Greewaste Grinder</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>No standard</td></tr> <tr> <td>PM2.5</td><td>No standard</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p>The SDCAPCD has a BACT trigger level of 10 lb/day.</p> <p>RULE REQUIREMENTS: None</p>	Portable Greewaste Grinder		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
Portable Greewaste Grinder															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	No standard														
PM2.5	No standard														
CO	No standard														

District/Agency	Best Available Control Technology (BACT)/Requirements														
Bay Area AQMD	<p><u>BACT</u> Source: BAAQMD BACT Guideline Document 180.1 (8/5/91)</p> <table border="1" data-bbox="418 447 1429 751"> <tr> <td colspan="2">Wood Processing Equipment</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>Water Spray w/ > 50% control efficiency</td></tr> <tr> <td>PM2.5</td><td>No standard</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p>The BAAQMD has a BACT trigger level of 10 lb/day.</p> <p><u>RULE REQUIREMENTS:</u> None.</p>	Wood Processing Equipment		VOC	No standard	NOx	No standard	SOx	No standard	PM10	Water Spray w/ > 50% control efficiency	PM2.5	No standard	CO	No standard
Wood Processing Equipment															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	Water Spray w/ > 50% control efficiency														
PM2.5	No standard														
CO	No standard														
San Joaquin Valley APCD	<p><u>BACT</u> Source: SJVUAPCD BACT Guideline 6.4.2</p> <table border="1" data-bbox="418 1062 1429 1434"> <tr> <td colspan="2">Tub Grinder – Transportable, Wood Waste Processing</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>Use of a water sprinkler system or maintaining moisture content of the process materials to prevent visible emissions in excess of 5% opacity.</td></tr> <tr> <td>PM2.5</td><td>No standard</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p>The SJVAPCD BACT trigger level is 2 lb/day.</p> <p><u>RULE REQUIREMENTS:</u> None</p>	Tub Grinder – Transportable, Wood Waste Processing		VOC	No standard	NOx	No standard	SOx	No standard	PM10	Use of a water sprinkler system or maintaining moisture content of the process materials to prevent visible emissions in excess of 5% opacity.	PM2.5	No standard	CO	No standard
Tub Grinder – Transportable, Wood Waste Processing															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	Use of a water sprinkler system or maintaining moisture content of the process materials to prevent visible emissions in excess of 5% opacity.														
PM2.5	No standard														
CO	No standard														

The following control technologies have been identified and are ranked based on stringency:

SUMMARY OF ACHIEVED IN PRACTICE CONTROL TECHNOLOGIES		
Pollutant	Standard	Source
VOC	1. The wood waste must not remain at the site for longer than 48 hours after it has been ground.	SCAQMD
NOx	No Standard	
SOx	No Standard	
PM10	1. VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials 2. Water Spray w/ > 50% control efficiency	SMAQMD, SJVAPCD BAAQMD
PM2.5	No Standard	
CO	No Standard	

The following control technologies have been identified as the most stringent, achieved in practice control technologies:

BEST CONTROL TECHNOLOGIES ACHIEVED		
Pollutant	Standard	Source
VOC	The wood waste must not remain at the site for longer than 48 hours after it has been ground.	SCAQMD
NOx	No Standard	
SOx	No Standard	
PM10	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SMAQMD, SJVAPCD
PM2.5	No standard	
CO	No Standard	

B. TECHNOLOGICALLY FEASIBLE AND COST EFFECTIVE (Rule 202, §205.1.b.):

Technologically Feasible Alternatives:

Any alternative basic equipment, fuel, process, emission control device or technique, singly or in combination, determined to be technologically feasible by the Air Pollution Control Officer. The table below shows the technologically feasible alternatives identified as capable of reducing emissions beyond the levels determined to be "Achieved in Practice" as per Rule 202, §205.1.a.

Pollutant	Technologically Feasible Alternatives
VOC	None identified
NOx	None identified
SOx	None identified
PM10	Baghouse
PM2.5	Baghouse
CO	None identified

This operation is a portable greenwaste grinder that will be moved throughout the processing area. The use of a baghouse requires electrical power. According to the grinder manufacturer (Peterson Corporation), while the equipment is operating at 100% capacity, the engine cannot provide additional power to other pieces of equipment such as a baghouse. This BACT will also apply to facilities that don't own their own equipment. These facilities would be issued flex permits, that will allow them to use equipment from various third party contractors. The requirement of a baghouse would put the burden on the operator or facility to obtain an additional permit for the baghouse. The greenwaste grinder is on tracks and can be easily moved from one location to another. The use of a baghouse would reduce the mobility of the equipment. There would also be a variation in the hp rating of the equipment, which may require a specific baghouse to be used with specific equipment. Therefore, it is not technologically feasible to use a baghouse with this type of portable equipment.

Using the PM10 BACT standard for PM2.5:

Since both, PM10 and PM2.5 trigger BACT at >0 lb/day and PM2.5 is a subset of PM10, BACT for PM2.5 will be triggered whenever BACT is triggered for PM10. Therefore, BACT for PM2.5 will be set to be the same as for PM10.

C. SELECTION OF BACT:

Small emitter BACT (< 10 lb/day) & Minor Source BACT for a portable greenwaste grinder is the following:

BACT FOR PORTABLE GREENWASTE GRINDER		
Pollutant	Standard	Source
VOC	The wood waste must not remain at the site for longer than 48 hours after it has been ground.	SCAQMD
NOx	No Standard	
SOx	No Standard	
PM10	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SMAQMD, SJVAPCD
PM2.5	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SMAQMD, SJVAPCD
CO	No Standard	

REVIEWED BY: _____ DATE: _____

APPROVED BY: _____ DATE: 9/12/17

Attachment A

Review of BACT Determinations

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

Printed: 5/30/2017

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 6.4.2*

Last Update: 04/03/1998

Tub Grinder - Transportable, Wood Waste Processing

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10	Use of a water sprinkler system or maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guideline

Source Category

Source:	Wood Processing Equipment	Revision:	1
Class:	All	Document #:	180.1
		Date:	08/05/91

Determination

POLLUTANT	BACT		TYPICAL TECHNOLOGY
	1. Technologically Feasible/ Cost Effective		
	2. Achieved in Practice		
POC	1. n/a	1. n/a	
	2. n/a	2. n/a	
NO _x	1. n/a	1. n/a	
	2. n/a	2. n/a	
SO ₂	1. n/a	1. n/a	
	2. n/a	2. n/a	
CO	1. n/a	1. n/a	
	2. n/a	2. n/a	
PM ₁₀	1. Enclosure and vent to a baghouse w/ ≤0.01 gr/dscf ^a	1. BAAQMD Approved Design and Operation ^a	
	2. Water mist spray w/ >50% control efficiency ^a	2. BAAQMD Approved Design and Operation ^a	
NPOC	1. n/a	1. n/a	
	2. n/a	2. n/a	

References

^a BAAQMD
