

CATEGORY:

IC ENGINE COMPRESSION-PRIME

BACT Size: Minor Source BACT

IC ENGINE PRIME POWER

BACT Determination Number: 167		BACT Determination Date: 9/12/2017	
Equipment Information			
Permit Number: 25332 Equipment Description: IC ENGINE PRIME POWER Unit Size/Rating/Capacity: Portable Greenwaste Trommel Screen Equipment Location: ZANKER ROAD RESOURCE MGMT, LTD DBA FLORIN PERKINS 4201 FLORIN PERKINS RD SACRAMENTO, CA			
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: 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.: 167

DATE: 9/12/17

ENGINEER: Felix Trujillo, Jr.

**Category/General Equip
Description:**

Screen

Equipment Specific Description:

Portable Greenwaste Trommel Screen

Equipment Size/Rating:

Small Emitter BACT (< 10 lb/day)/Minor Source

Previous BACT Det. No.:

None

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 greenwaste trommel screen operations:

District/Agency	Best Available Control Technology (BACT)/Requirements
US EPA	<u>BACT</u>
	<u>Source: EPA RACT/BACT/LAER Clearinghouse</u>
	Portable Greenwaste Trommel Screen
	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="423 428 1430 774"> <tr> <td colspan="2">Portable Greenwaste Trommel Screen</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 greenwaste trommel screen 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 	Portable Greenwaste Trommel Screen		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
Portable Greenwaste Trommel Screen															
VOC	No standard														
NOx	No standard														
SOx	No standard														
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PM2.5	No standard														
CO	No standard														
SMAQMD	<p><u>BACT</u> Source: SMAQMD BACT Clearinghouse</p> <table border="1" data-bbox="423 1220 1430 1545"> <tr> <td colspan="2">Portable Greenwaste Trommel Screen</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> None</p>	Portable Greenwaste Trommel Screen		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
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District/Agency	Best Available Control Technology (BACT)/Requirements														
South Coast AQMD	<p><u>BACT</u> Source: SCAQMD BACT Guidelines for Non-Major Polluting Facilities, page 13.</p> <table border="1" data-bbox="423 432 1435 793"> <tr> <td colspan="2">Portable Greenwaste Trommel Screen</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> None</p>	Portable Greenwaste Trommel Screen		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
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CO	No standard														
San Diego County APCD	<p><u>BACT</u> Source: NSR Requirements for BACT, page 27.</p> <table border="1" data-bbox="423 1041 1435 1402"> <tr> <td colspan="2">Portable Greewaste Trommel Screen</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><u>RULE REQUIREMENTS:</u> None</p>	Portable Greewaste Trommel Screen		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
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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="423 447 1425 772"> <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>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 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	No standard	PM2.5	No standard	CO	No standard
Wood Processing Equipment															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	No standard														
PM2.5	No standard														
CO	No standard														
San Joaquin Valley APCD	<p><u>BACT</u> Source: SJVUAPCD BACT Guideline 6.4.1</p> <table border="1" data-bbox="423 1083 1425 1465"> <tr> <td colspan="2">Composted Materials – Screening, 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>According to the details page of BACT Guideline 6.4.1, the emissions unit for this BACT was a transportable trommel screen (see Attachment A).</p> <p>The SJVAPCD BACT trigger level is 2 lb/day.</p> <p><u>RULE REQUIREMENTS:</u> None</p>	Composted Materials – Screening, 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
Composted Materials – Screening, 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	No Standard	
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	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	No Standard	
NOx	No Standard	
SOx	No Standard	
PM10	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	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 trommel screen that will be moved throughout the processing area. The use of a baghouse requires electrical power. The engines on these types of equipment can only power the equipment that is associated with the manufactured unit and cannot power additional equipment such as baghouses (as explained in BACT 166 for a wood waste grinder). 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 wheels 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:

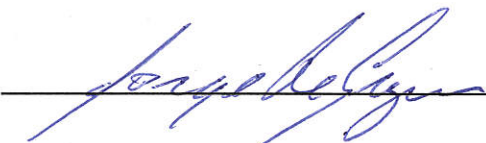
Since both, PM10 and PM2.5 trigger BACT at >0 lb/day and PM2.5 is a subset of PM10, BACT for PM2.5 will be triggered whenever BACT is triggered for PM10. Therefore, BACT for PM2.5 will be set to be the same as for PM10.

C. SELECTION OF BACT

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

BACT FOR PORTABLE GREENWASTE TROMMEL SCREEN		
Pollutant	Standard	Source
VOC	No standard	
NOx	No standard	
SOx	No standard	
PM10	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SJVAPCD
PM2.5	VEE < or equal to 5% Opacity; Water spray or adequate moisture of process materials	SJVAPCD
CO	No standard	

REVIEWED BY: _____ DATE: _____

APPROVED BY:  DATE: 9/12/17

Attachment A

Review of BACT Determinations

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 6.4.1*

Last Update: 04/03/1998

**Composted Materials - Screening, 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**

About the District
Agriculture
Air Pollution Complaints
Air Quality Forecasts
& Data
Air Quality Plans
Business Assistance
Business Opportunities
Compliance Assistance
Employment
Environmental Justice
For Schools and Kids
Grants & Incentives
Healthy Air Living
Information & Requests
Land Use / CEQA / ISR
Modeling & Inventory
Online Bill Payment
Permitting / Registration
Public Meetings & Events
Public Participation
Rules & Regulations
Take Action

Search:

Q

BACT Clearinghouse (Searchable)

Facility:	City of Modesto, Compost Facility	References:	ATC #: N-3993-2-0 Project #: 960583
Location:	Various locations, SJVUAPCD	Date of Determination:	4/3/1998
Pollutant	BACT		
CO	BACT NOT TRIGGERED		
NOx	BACT NOT TRIGGERED		
PM10	Use of a water sprinkler system on the Trommel screen or maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity		
SOx	BACT NOT TRIGGERED		
VOC	BACT NOT TRIGGERED		

BACT Status

Comment

Achieved in Practice

At the time of this determination achieved in practice BACT
was equivalent to technologically feasible BACT

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 2. n/a	1. n/a 2. n/a
NO _x	1. n/a 2. n/a	1. n/a 2. n/a
SO ₂	1. n/a 2. n/a	1. n/a 2. n/a
CO	1. n/a 2. n/a	1. n/a 2. n/a
PM ₁₀	1. Enclosure and vent to a baghouse w/ ≤ 0.01 gr/dscf ^a 2. Water mist spray w/ $\geq 50\%$ control efficiency ^a	1. BAAQMD Approved Design and Operation ^a 2. BAAQMD Approved Design and Operation ^a
NPOC	1. n/a 2. n/a	1. n/a 2. n/a

References

^a BAAQMD
