SMAQMD BACT CLEARINGHOUSE

CATEGORY Type: **MATERIAL - HANDLING**

BACT Category: MINOR SOURCE

BACT Determination Number: 276	**BACT Determination Date:** 1/11/2022

Equipment Information

Permit Number: N/A -- Generic BACT Determination

Equipment Description: PORTABLE GREENWASTE/WOODWASTE TROMMEL SCREEN

Unit Size/Rating/Capacity:

Equipment Location:

EXPIRED

BACT Determination Information

District Contact: Felix Trujillo Phone No.: (279)207-1154 email: ftrujillo@airquality.org

ROCs	**Standard:**	
	Technology Description:	
	Basis:	
NOx	**Standard:**	
	Technology Description:	
	Basis:	
SOx	**Standard:**	
	Technology Description:	
	Basis:	
PM10	**Standard:**	EE < 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.

Printed: 1/11/2022

777 12th Street, Third Floor

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Sacramento, CA 95814

BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION

EXPIRED

DETERMINATION NO.: 276

DATE: 1/11/22

ENGINEER: Felix Trujillo, Jr.

Category/General Equip Description: Trommel Screen

Equipment Specific Description: Portable Greenwaste/Woodwaste Trommel Screen

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

Previous BACT Det. No.: 167

This BACT determination will update Determination #167 (9/12/17) for a portable greenwaste trommel screen. The process involves greenwaste/woodwaste being loaded into a feed hopper and screened by the rotating trommel screen to remove any unwanted materials. The waste is then transferred via associated conveyors to stockpiles. The equipment is all skid mounted and is portable.

A. BACT ANALYSIS:

Pursuant to the District's Draft 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. 167. Also, no new technologically feasible control technologies were identified. Therefore, there is no change in requirements as was previously determined under BACT No. 167. BACT No. 167 will be attached as a reference for this BACT determination (see Appendix A).

This BACT will clarify that it applies to woodwaste and greenwaste.

B. SELECTION OF BACT:

BACT for Portable Greenwaste/Woodwaste Trommel Screen operations is the following:

BACT # 276 for Portable Greenwaste/Woodwaste 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	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:** 01-11-2022

Attachment A

BACT No. 167

ACTIVE SMAQMD BACT CLEARINGHOUSE

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

Printed: 9/15/2017

777 12th Street, Third Floor

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Sacramento, CA 95814

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	**BACT** Source: EPA RACT/BACT/LAER Clearinghouse

Portable Greenwaste Trommel Screen	
VOC	No standard
NOx	No standard
SOx	No standard
PM10	No standard
PM2.5	No standard
CO	No standard

RULE REQUIREMENTS:
None

<table>
<tr><th>District/Agency</th><th>Best Available Control Technology (BACT)/Requirements</th></tr>
<tr><td>ARB</td><td>
<u>BACT</u>
Source: ARB BACT Clearinghouse
<table>
<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>
<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.
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 atmoshphere 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
</td></tr>
<tr><td>SMAQMD</td><td>
<u>BACT</u>
Source: SMAQMD BACT Clearinghouse
<table>
<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>
<u>RULE REQUIREMENTS</u>:
None
</td></tr>
</table>

<table>
<tr><th>District/Agency</th><th>Best Available Control Technology (BACT)/Requirements</th></tr>
<tr><td>South Coast AQMD</td><td>
<u>BACT</u>
Source: SCAQMD BACT Guidelines for Non-Major Polluting Facilities, page 13.
<table>
<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>
<u>RULE REQUIREMENTS</u>:
None
</td></tr>
<tr><td>San Diego County APCD</td><td>
<u>BACT</u>
Source: NSR Requirements for BACT, page 27.
<table>
<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>
The SDCAPCD has a BACT trigger level of 10 lb/day.

<u>RULE REQUIREMENTS</u>:
None
</td></tr>
</table>

<table>
<tr><th>District/Agency</th><th>Best Available Control Technology (BACT)/Requirements</th></tr>
<tr><td>Bay Area AQMD</td><td>
<u>BACT</u>
Source: BAAQMD BACT Guideline Document 180.1 (8/5/91)

<table>
<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>

The BAAQMD has a BACT trigger level of 10 lb/day.

<u>RULE REQUIREMENTS</u>:
None.
</td></tr>
<tr><td>San Joaquin Valley APCD</td><td>
<u>BACT</u>
Source: SJVUAPCD BACT Guideline 6.4.1

<table>
<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>

According the the details page of BACT Guideline 6.4.1, the emissions unit for this BACT was a transportable trommel screen (see Attachment A).

The SJVAPCD BACT trigger level is 2 lb/day.

<u>RULE REQUIREMENTS</u>:
None
</td></tr>
</table>

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*

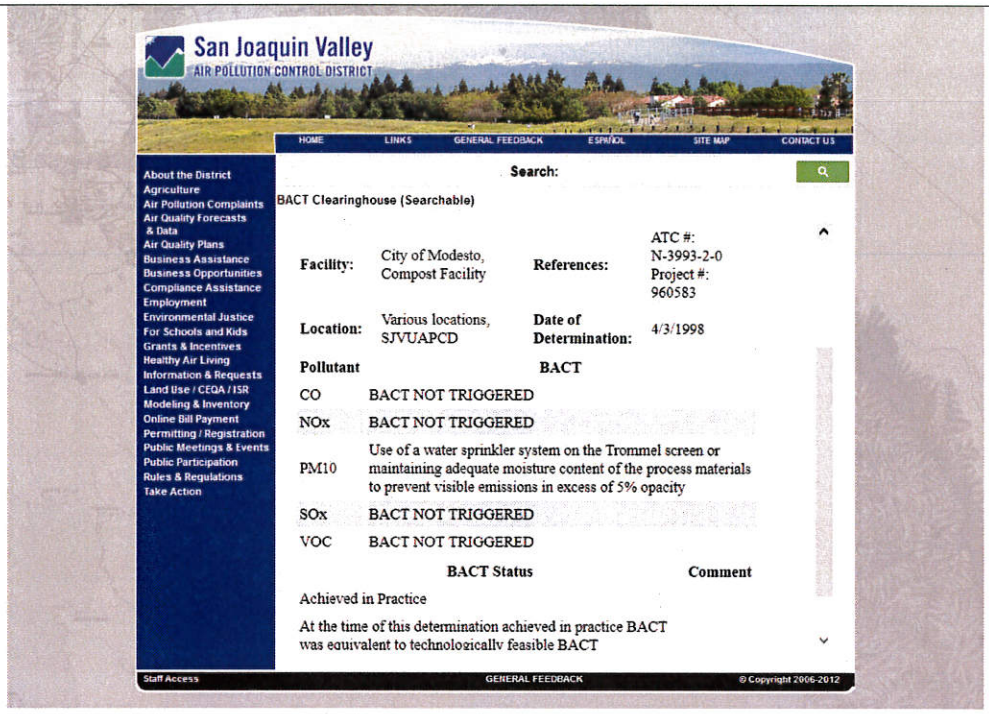
Last Update: 04/03/1998

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 s 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**



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HOME | LINKS | GENERAL FEEDBACK | ESPAÑOL | SITE MAP | CONTACT US

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:

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	

Staff Access | GENERAL FEEDBACK | © Copyright 2006-2012

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

Source Category

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

Determination

POLLUTANT	BACT 1. Technologically Feasible/ Cost Effective 2. Achieved in Practice	TYPICAL TECHNOLOGY
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. *Enclsoure and vent to a baghouse w/ ≤0.01 gr/dscf*[a] 2. *Water mist spray w/ >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