



**TECHNICAL SUPPORT DOCUMENT**

**Air Discharge Permit 25-3683  
Air Discharge Permit Application CL-3284**

**Issued: January 22, 2025**

**McFarlane's Bark, Inc.**

**SWCAA ID – 2532**

Prepared By: Clint Lamoreaux  
Air Quality Engineer  
Southwest Clean Air Agency

## TABLE OF CONTENTS

1. FACILITY IDENTIFICATION .....	1
2. FACILITY DESCRIPTION .....	1
3. CURRENT PERMITTING ACTION.....	1
4. PROCESS DESCRIPTION .....	2
5. EQUIPMENT/ACTIVITY IDENTIFICATION .....	2
6. EMISSIONS DETERMINATION .....	3
7. REGULATIONS AND EMISSION STANDARDS .....	7
8. RACT/BACT/BART/LAER/PSD/CAM DETERMINATIONS.....	9
9. AMBIENT IMPACT ANALYSIS .....	10
10. DISCUSSION OF APPROVAL CONDITIONS .....	11
11. START-UP AND SHUTDOWN/ALTERNATIVE OPERATING SCENARIOS/POLLUTION PREVENTION.....	12
12. EMISSION MONITORING AND TESTING.....	13
13. FACILITY HISTORY .....	13
14. PUBLIC INVOLVEMENT OPPORTUNITY .....	13

## ABBREVIATIONS

### *List of Acronyms*

ADP .....	Air Discharge Permit	NSPS .....	New Source Performance Standard
BACT .....	Best available control technology	PSD .....	Prevention of Significant Deterioration
BART .....	Best Available Retrofit Technology	RACT .....	Reasonably Available Control Technology
CAM .....	Compliance Assurance Monitoring	RCW .....	Revised Code of Washington
CAS#.....	Chemical Abstracts Service registry number	SQER .....	Small Quantity Emission Rate listed in WAC 173-460
CFR.....	Code of Federal Regulations	Standard .....	Standard conditions at a temperature of 68°F (20°C) and a pressure of 29.92 in Hg (760 mm Hg)
EPA .....	U.S. Environmental Protection Agency	SWCAA .....	Southwest Clean Air Agency
EU .....	Emission Unit	T-BACT .....	Best Available Control Technology for toxic air pollutants
LAER.....	Lowest achievable emission rate	WAC .....	Washington Administrative Code
MACT .....	Maximum Achievable Control Technologies		
NESHAP .....	National Emission Standards for Hazardous Air Pollutants		
NOV.....	Notice of Violation/		

### *List of Units and Measures*

lb/ .....	Pounds per	lb/yr.....	Pounds per year
lb/hr.....	Pounds per hour	tpy .....	Tons per year

*List of Chemical Symbols, Formulas, and Pollutants*

CH <sub>4</sub> .....	Methane	O <sub>3</sub> .....	Ozone
CO.....	Carbon monoxide	PM.....	Particulate Matter with an aerodynamic diameter 100 µm or less
CO <sub>2</sub> .....	Carbon dioxide	PM <sub>10</sub> .....	PM with an aerodynamic diameter 10 µm or less
CO <sub>2e</sub> .....	Carbon dioxide equivalent	PM <sub>2.5</sub> .....	PM with an aerodynamic diameter 2.5 µm or less
H <sub>2</sub> S.....	Hydrogen sulfide	SO <sub>2</sub> .....	Sulfur dioxide
HAP.....	Hazardous air pollutant listed pursuant to Section 112 of the Federal Clean Air Act	SO <sub>x</sub> .....	Sulfur oxides
N <sub>2</sub> O.....	Nitrous oxide	TAP.....	Toxic air pollutant pursuant to Chapter 173-460 WAC
NO <sub>2</sub> .....	Nitrogen dioxide	VOC.....	Volatile organic compound
NO <sub>x</sub> .....	Nitrogen oxides		
O <sub>2</sub> .....	Oxygen		

Terms not otherwise defined have the meaning assigned to them in the referenced regulations or the dictionary definition, as appropriate.

## 1. FACILITY IDENTIFICATION

Applicant Name: McFarlane's Bark, Inc.  
Applicant Address: 8806 NE 117<sup>th</sup> Avenue, Vancouver, WA 98662

Facility Name: McFarlane's Bark  
Facility Address: 8806 NE 117<sup>th</sup> Avenue, Vancouver, WA 98662

SWCAA Identification: 2532

Contact Person: Dan McFarlane - President

Primary Process: Green waste handling, wood chipping  
SIC/NAICS Code: 2411: Logging  
113310: Wood chipping in the field

Facility Latitude and Longitude: 45°41'10.65"N  
122°33'13.04"W  
Facility Classification: Natural Minor

## 2. FACILITY DESCRIPTION

McFarlane's Bark, Inc. (McFarlane's) operates a wood recycling facility and accepts organic waste (green and woody waste) for sale, off-site composting, or other uses. The company uses diesel engine driven portable equipment used to grind, handle and store wood, brush and similar materials.

## 3. CURRENT PERMITTING ACTION

This permitting action is in response to Air Discharge Permit (ADP) application number CL-3284 received December 20, 2024. ADP application CL-3284 was submitted to satisfy Notice to Correct 11308. Notice to Correct 11308 required McFarlane's to submit an ADP for green and woody waste handling activities no later than January 5, 2025. NOV 11308 was issued after a SWCAA inspector visited the site in response to odor complaints and found stockpiling of green waste for extended periods of time, resulting in odors and emissions above the relevant permitting thresholds. Two days after SWCAA's site visit, McFarlane's personnel found the pile on fire and called the fire department. Four days after the fire was first reported, SWCAA visited the site and observed the pile still smoldering, but under control. The fire presumably was the result of a self-ignition due to decomposition of organic material in the fire. This decomposition is a source of VOC and odors.

This facility currently holds two individual permits for portable wood grinders driven by non-road diesel engines. As requested by the applicant, the approvals for these two pieces of equipment will be incorporated into a single Air Discharge Permit with the requirements for green waste handling.

ADP/NEP 25-3683 will supersede ADP 19-3362 and ADP 19-3376 in their entirety.

#### 4. PROCESS DESCRIPTION

- 4.a. Green Waste Handling (new). The facility receives, stockpiles, and ships green waste from the facility. Various pieces of mobile equipment are used to pile, load, and move material on-site.
- 4.b. Material Handling (existing). Two portable wood grinders are used to grind and handle wood, brush and similar materials. Received material is ground and stacked for storage/shipment. Material storage piles, haul roads, and other dust sources will be watered as necessary to control fugitive dust emissions. The equipment is portable and may operate at multiple locations.

#### 5. EQUIPMENT/ACTIVITY IDENTIFICATION

- 5.a. Green and Woody Waste Handling (modified). The facility receives, stockpiles, and ships green waste from the facility. Various pieces of mobile equipment are used to pile, load, and move material on-site. Fugitive dust emissions from wood grinding and material handling activities are controlled with wet suppression as necessary. Fugitive dust sources include but are not necessarily limited to:
- (1) Mobile equipment operation;
  - (2) Vehicle haul roads; and
  - (3) Storage pile wind erosion.
- 5.b. Horizontal Grinder – Plant 1 (existing). This unit is a wheeled, horizontal grinder powered by an integral diesel engine. Fugitive dust from grinder operation is controlled with wet suppression as necessary.

Make / Model: Morbark / 6600  
 Manufactured: 2007  
 Size / Capacity: 66" x 50" infeed opening

- 5.c. Horizontal Grinder – Plant 2 (existing – Previously permitted under SWCAA ID 2532). This unit is a wheeled, horizontal grinder powered by an integral diesel engine. Fugitive dust from grinder operation is controlled with wet suppression as necessary.

Equipment ID: 621 (Plant 2)  
 Make / Model: Morbark / 6600  
 Manufactured: 2007  
 Size / Capacity: 66" x 50" infeed opening

- 5.d. Nonroad Diesel Engine - Plant 1 (existing). This unit is a diesel engine integral to the Morbark 6600 horizontal grinder. This unit is classified as a nonroad engine.

Engine Make / Model: Caterpillar / 3412E DITA (s/n BDT05092)  
 Engine Power Rating: 1,000 bhp  
 Engine Fuel Consumption: 51 gal/hr (full load)  
 Engine Mfg. Date: 2006  
 Engine Certification: EPA Tier 1 (EPA/CARB Flex engine)  
 Federal Regulations: 40 CFR 1039  
 Stack Description: 8" diameter vertical discharge at ~13' above grade

- 5.e. Nonroad Diesel Engine - Plant 2 (existing – Previously permitted under SWCAA ID 2532). This unit is a diesel engine integral to the Morbark 6600 horizontal grinder. This unit is classified as a nonroad engine.

Engine Make / Model: Caterpillar / 3412E DITA  
 Engine Serial Number: BDT03490  
 Engine Power Rating: 1,000 bhp  
 Engine Fuel Consumption: 52.02 gallons per hour (full load)  
 Engine Mfg. Date: 2004  
 Engine Certification: EPA Tier 1  
 Federal Regulations: 40 CFR 1039  
 Stack Description: 8" diameter vertical discharge at ~13' above grade

- 5.f. Equipment/Activity Summary.

ID No.	Equipment/Activity	Control Equipment/Measure
1	Green and Woody Waste Handling	Wet suppression, stockpiling limitations
2	Horizontal Grinder – Plant 1 (Morbark 6600)	Wet suppression as necessary
3	Horizontal Grinder – Plant 2 (Morbark 6600)	Wet suppression as necessary
4	Nonroad Diesel Engine – Plant 1 (Caterpillar – 1,000 hp)	Ultra-low sulfur diesel, EPA Tier 1 certification
5	Nonroad Diesel Engine – Plant 2 (Caterpillar – 1,000 hp)	Ultra-low sulfur diesel, EPA Tier 1 certification

## 6. EMISSIONS DETERMINATION

Unless otherwise specified by SWCAA, actual emissions must be determined using the specified input parameter listed for each emission unit and the following hierarchy of methodologies:

- (a) Continuous emissions monitoring system (CEMS) data;

- (b) Source emissions test data (EPA reference method). When source emissions test data conflicts with CEMS data for the time period of a source test, source test data must be used;
- (c) Source emissions test data (other test method); and
- (d) Emission factors or methodology provided in this TSD.

Nothing precludes the use, including the exclusive use of any credible evidence or information relevant to identifying or quantifying emissions if methods identified above, in the ADP, or elsewhere in this TSD have not provided adequate quantification of actual emissions.

- 6.a. Green and Woody Waste Handling. VOC, TAP, and HAP emissions can derive from waste decomposition, particularly if the waste is stored in such a way that the decomposition is anaerobic. If green waste is moved off-site in a timely manner (before self-heating and significant degradation can take place) emissions and odor from green waste stockpiling are expected to be negligible.

Emissions from fugitive dust sources, including wood grinding, can be significant if such sources are not managed properly. Wet suppression is required as necessary to prevent the generation of fugitive dust. With proper management, emissions from these sources will be negligible.

Green waste that is collected and stored on-site can begin biological degradation (uncontrolled composting if aerobic, rotting if anaerobic) without any intervention. If this occurs, this process will emit pollutants in the same fashion as composting. The California Air Resource Board document titled "Emissions Inventory Methodology for Composting Facilities (3/2/2015) provides an average VOC emission factor of 0.200 pounds VOC per wet ton of green waste per day. The San Joaquin Valley Air Pollution Control District document titled "Compost Emission Factor Report (Revised March 21, 2023) provides an average ammonia emission factor of 0.02 pounds ammonia per wet ton of green waste per day.

These emission factors are based on a review of source emission test data. Because emissions from stockpiling are very high, SWCAA believes that BACT requires that all green waste be removed from the site before the material self-heats significantly. If green waste is removed from the site before it self-heats significantly and before the limitations provided in the Air Discharge Permit, SWCAA believes it is appropriate to assume that stockpiling emissions are negligible. Evidence of self-heating includes steam generation, smoke, fire, or temperatures above ambient temperatures in the pile. If green waste is stockpiled in violation of the Permit, SWCAA will apply the emission factors above to calculate VOC and ammonia emissions.



<b>Green Waste Stockpiling</b>			
Days decomposing =	0 days (average)		
Amount Received =	0 tons		
<b>Emissions</b>			
<b>Factor</b>			
	<b>(lb/day/ton)</b>	<b>tpy</b>	<b>Emission Factor Source</b>
VOC Emissions	0.200	0.00	ARB EI Methodology for Composting - 3/2/2015
Ammonia (NH <sub>3</sub> ) Emissions	0.020	0.00	SJV Compost EF Report - Revised 3/21/2023

- 6.b. Diesel Engine – Plant 1 (Morbark 6600). Potential annual emissions from the combustion of ultra-low sulfur diesel ( $\leq 0.0015\%$  sulfur by weight) were calculated with the assumption that the equipment will operate at full load for up to 2,080 hours per year.

<b>Diesel Engine - Plant 1 (Morbark 6600)</b>						
Hours of Operation =	2,080 hours					
Power Output =	1,000 horsepower					
Diesel Density =	7.206 pounds per gallon					
Fuel Sulfur Content =	0.0015 % by weight					
Fuel Consumption Rate =	52.02 gallons per hour (Caterpillar Performance Data)					
Fuel Heat Content =	0.138 MMBtu/gal (for use with GHG factors from 40 CFR 98)					
Annual Fuel Consumption =	108,202 gallons					
	Emission					
Pollutant	Factor lb/hr	Emissions tpy	Emission Factor Source			
NO <sub>x</sub>	15.0	15.60	Caterpillar			
CO	0.79	0.82	Caterpillar			
VOC	0.080	0.083	Caterpillar			
SO <sub>x</sub> as SO <sub>2</sub>	0.011	0.012	Mass Balance			
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.15	0.16	Caterpillar			
			CO <sub>2</sub> e	CO <sub>2</sub> e		
Greenhouse Gases	kg/MMBtu	GWP	lb/MMBtu	lb/gallon	tpy, CO <sub>2</sub> e	
CO <sub>2</sub>	73.96	1	163.05	22.501	1,217.3	40 CFR 98
CH <sub>4</sub>	0.003	25	0.165	0.023	1.23	40 CFR 98
N <sub>2</sub> O	0.0006	298	0.394	0.054	2.94	40 CFR 98
<b>Total GHG - CO<sub>2</sub>e</b>	<b>73.9636</b>		<b>163.613</b>	<b>22.579</b>	<b>1,222</b>	

- 6.c. Diesel Engine – Plant 2 (Morbark 6600). Potential annual emissions from the combustion of ultra-low sulfur diesel ( $\leq 0.0015\%$  sulfur by weight) were calculated with the assumption that the equipment will operate at full load for up to 2,080 hours per year.

<b>Diesel Engine - Plant 2 (Morbark 6600)</b>						
Hours of Operation =	2,080 hours					
Power Output =	1,000 horsepower					
Diesel Density =	7.206 pounds per gallon					
Fuel Sulfur Content =	0.0015 % by weight					
Fuel Consumption Rate =	52.02 gallons per hour (Caterpillar Performance Data)					
Fuel Heat Content =	0.138 MMBtu/gal (for use with GHG factors from 40 CFR 98)					
Annual Fuel Consumption =	108,202 gallons					
	Emission					
	Factor	Emissions	Emission Factor			
Pollutant	lb/hr	tpy	Source			
NO <sub>x</sub>	15.0	15.60	Caterpillar			
CO	0.79	0.82	Caterpillar			
VOC	0.080	0.083	Caterpillar			
SO <sub>x</sub> as SO <sub>2</sub>	0.011	0.012	Mass Balance			
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.15	0.16	Caterpillar			
			CO <sub>2</sub> e	CO <sub>2</sub> e		
Greenhouse Gases	kg/MMBtu	GWP	lb/MMBtu	lb/gallon	tpy, CO <sub>2</sub> e	
CO <sub>2</sub>	73.96	1	163.05	22.501	1,217.3	40 CFR 98
CH <sub>4</sub>	0.003	25	0.165	0.023	1.23	40 CFR 98
N <sub>2</sub> O	0.0006	298	0.394	0.054	2.94	40 CFR 98
Total GHG - CO <sub>2</sub> e	73.9636		163.613	22.579	1,222	

6.d. Emissions Summary

<b>Air Pollutant</b>	<b>Facility-wide Potential to Emit (tpy)</b>	<b>Project Impact (tpy)</b>
NO <sub>x</sub>	31.20	0
CO	1.64	0
VOC	0.17	0
SO <sub>2</sub>	0.02	0
PM	0.31	0
PM <sub>10</sub>	0.31	0
PM <sub>2.5</sub>	0.31	0
TAP	0	0
HAP	0	0
CO <sub>2</sub> /CO <sub>2</sub> e	2,443	0

## 7. REGULATIONS AND EMISSION STANDARDS

Regulations have been established for the control of emissions of air pollutants to the ambient air. Regulations applicable to the proposed facility that have been used to evaluate the acceptability of the proposed facility and establish emission limits and control requirements include, but are not limited to, the following regulations, codes, or requirements. These items establish maximum emissions limits that could be allowed and are not to be exceeded for new or existing facilities. More stringent limits are established in this Permit consistent with implementation of Best Available Control Technology (BACT):

- 7.a. Title 40 Code of Federal Regulations (40 CFR) Part 1039 includes requirements for all nonroad engines. In accordance with Appendix A to Subpart A of Part 1074, states are precluded from requiring retrofitting of nonroad engines except that states are permitted to adopt and enforce any such retrofitting requirements identical to California requirements which have been authorized by EPA under section 209 of the Clean Air Act. States may enforce regulations such as hours of usage, daily mass emission limits, and sulfur limits on fuel.

The definition of nonroad engines in 40 CFR 1068 includes any internal combustion engine that is in or on a piece of equipment that is portable or transportable and does not remain, and will not remain, at a location for more than 12 consecutive months (not including seasonal sources). The Plant 1 and Plant 2 diesel engines are on trailer-mounted units that will not remain at a location (not including storage) for more than 12 consecutive months; therefore, these units are classified as nonroad engines.

- 7.b. Revised Code of Washington (RCW) 70A.15.2040 empowers any activated air pollution control authority to prepare and develop a comprehensive plan or plans for the prevention, abatement and control of air pollution within its jurisdiction. An air pollution control authority may issue such orders as may be necessary to effectuate the purposes of the Washington Clean Air Act (RCW 70A.15) and enforce the same by all appropriate administrative and judicial proceedings subject to the rights of appeal as provided in Chapter 62, Laws of 1970 ex. sess. This law applies to the facility.
- 7.c. RCW 70A.15.2210 provides for the inclusion of conditions of operation as are reasonably necessary to assure the maintenance of compliance with the applicable ordinances, resolutions, rules and regulations when issuing an ADP for installation and establishment of an air contaminant source. This law applies to the facility.
- 7.d. WAC 173-460 "Controls for New Sources of Toxic Air Pollutants" requires BACT for toxic air pollutants (T-BACT), identification and quantification of emissions of toxic air pollutants, and demonstration of protection of human health and safety.

The facility may emit TAPs; therefore, this regulation applies to the facility.

- 7.e. WAC 173-476 "Ambient Air Quality Standards" establishes ambient air quality standards for PM<sub>10</sub>, PM<sub>2.5</sub>, lead, SO<sub>2</sub>, NO<sub>x</sub>, ozone, and CO in the ambient air, which must not be exceeded. The facility emits PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub>, and CO; therefore, certain sections of

this regulation apply. The facility does not emit lead; therefore, the lead regulation section does not apply.

- 7.f. SWCAA 400-040 "General Standards for Maximum Emissions" requires all new and existing sources and emission units to meet certain performance standards with respect to Reasonably Available Control Technology (RACT), visible emissions, fallout, fugitive emissions, odors, emissions detrimental to persons or property, SO<sub>2</sub>, concealment and masking, and fugitive dust. This regulation applies to the facility.
- 7.g. SWCAA 400-040(1) "Visible Emissions" requires that emissions of an air contaminant from any emissions unit must not exceed twenty percent opacity for more than three minutes in any one hour at the emission point, or within a reasonable distance of the emission point. This regulation applies to the facility.
- 7.h. SWCAA 400-040(2) "Fallout" requires that emissions of PM from any source must not be deposited beyond the property under direct control of the owner(s) or operator(s) of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited. This regulation applies to the facility.
- 7.i. SWCAA 400-040(4) "Odors" requires any source which generates odors that may unreasonably interfere with any other property owner's use and enjoyment of their property to use recognized good practice and procedures to reduce these odors to a reasonable minimum. This source must be managed properly to maintain compliance with this regulation. This regulation applies to the facility.
- 7.j. SWCAA 400-040(8) "Fugitive Dust Sources" requires that reasonable precautions be taken to prevent fugitive dust from becoming airborne and to minimize emissions. This regulation applies to the facility.
- 7.k. SWCAA 400-109 "Air Discharge Permit Applications" requires that an ADP application be submitted for all new installations, modifications, changes, or alterations to process and emission control equipment consistent with the definition of "new source". Sources wishing to modify existing permit terms may submit an ADP application to request such changes. An ADP must be issued, or written confirmation of exempt status must be received, before beginning any actual construction, or implementing any other modification, change, or alteration of existing equipment, processes, or permits. This regulation applies to the facility.
- 7.l. SWCAA 400-110 "New Source Review" requires that SWCAA issue an ADP in response to an ADP application prior to establishment of the new source, emission unit, or modification.
- 7.m. SWCAA 400-111 "Requirements for Sources in a Maintenance Plan Area" requires that no approval to construct or alter an air contaminant source will be granted unless it is evidenced that:

- (1) The equipment or technology is designed and will be installed to operate without causing a violation of the applicable emission standards;
- (2) Emissions will be minimized to the extent that the new source will not exceed emission levels or other requirements provided in the maintenance plan;
- (3) BACT will be employed for all air contaminants to be emitted by the proposed equipment;
- (4) The proposed equipment will not cause any ambient air quality standard to be exceeded; and
- (5) If the proposed equipment or facility will emit any toxic air pollutant regulated under WAC 173-460, the proposed equipment and control measures will meet all the requirements of that Chapter.

The facility is located in a maintenance plan area; therefore, this regulation applies to the facility.

## 8. RACT/BACT/BART/LAER/PSD/CAM DETERMINATIONS

The proposed equipment and control systems incorporate BACT for the types and amounts of air contaminants emitted by the processes as described below:

### New BACT Determination(s)

- 8.a. Green Waste Handling. The primary method of controlling and preventing emissions from green waste is to limit the time the waste decomposes in an uncontrolled manner rather than in a properly controlled composting process. Uncontrolled decomposition results in much greater emissions of VOCs, ammonia, and odors than a properly controlled composting process. In addition, uncontrolled decomposition increases the risk of spontaneous combustion.

In SWCAA's jurisdiction, green waste handling facilities (primarily composting facilities) have been required to remove or incorporate incoming green waste no later than one day after receipt. Several examples are provided in the table below.

Facility	BACT Notes
H and H Wood Recyclers	Required to remove putrescible materials from the site or incorporate into composting pile no later than the next day. Green waste received by dedicated waste hauling trucks must be removed the same day.
Cowlitz Valley Compost	Required to remove putrescible materials from the site or incorporate into composting pile no later than the next day. Green waste received by dedicated waste hauling trucks must be removed the same day.
City of Centralia Wastewater	Prohibited from stockpiling green waste other than biosolids and waste activated sludge.
Little Hanaford Farms	Incoming material was required to be incorporated into compost piles the day of receipt.

Based on a review of past permitting actions at facilities handling green waste, and the significant potential to create emissions of pollutants and odors, SWCAA finds that BACT requires the removal of green waste from the site no later than one day after receipt (Saturdays excepted) unless circumstances beyond the control of the Permittee cause a delay, in which case contingency measures must be taken. Operating waste transfer operations on Sunday would be more expensive than weekday operations and SWCAA believes the relatively small potential for VOC emissions does not justify this extra expense.

Previous BACT Determination(s)

None – the previous permitting actions were primary to address nonroad engines that are not subject to BACT.

Other Determinations

- 8.b. Prevention of Significant Deterioration (PSD) Applicability Determination. This permitting action will not result in a potential increase in emissions equal to or greater than the PSD thresholds. Therefore, PSD review is not applicable to this action.
- 8.c. Compliance Assurance Monitoring (CAM) Applicability Determination. CAM is not applicable to any emission unit at this facility because it is not a major source and is not required to obtain a Part 70 (Title V) permit.

## 9. AMBIENT IMPACT ANALYSIS

- 9.a. Criteria Air Pollutant Review. Emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, PM<sub>2.5</sub>, VOC (as a precursor to O<sub>3</sub>), and SO<sub>2</sub> are emitted at levels where no adverse ambient air quality impact is anticipated.
- 9.b. Toxic Air Pollutant Review. Incremental increases in toxic air pollutant emissions will not exceed the applicable Small Quantity Emission Rates (SQER) listed in WAC 173-460; therefore, toxic impacts are presumed to be below regulatory significance.

### Conclusions

- 9.c. Operation of the green and woody waste handling and grinding facility, as proposed in ADP application CL-3284 and in accordance with ADP/NEP 25-3683, will not cause the ambient air quality requirements of 40 CFR 50 "National Primary and Secondary Ambient Air Quality Standards" to be violated.
- 9.d. Operation of the green and woody waste handling and grinding facility, as proposed in ADP application CL-3284 and in accordance with ADP/NEP 25-3683, will not cause the requirements of WAC 173-460 "Controls for New Sources of Toxic Air Pollutants" or WAC 173-476 "Ambient Air Quality Standards" to be violated.
- 9.e. Operation of the green and woody waste handling and grinding facility, as proposed in ADP application CL-3284 and in accordance with ADP/NEP 25-3683, will not violate emission

standards for sources as established under SWCAA General Regulations Sections 400-040 "General Standards for Maximum Emissions."

## 10. DISCUSSION OF APPROVAL CONDITIONS

SWCAA has made a determination to issue ADP/NEP 25-3683 in response to ADP application CL-3284. ADP/NEP 25-3683 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards as discussed below.

- 10.a. Supersession of Previous Permits. ADP/NEP 25-3683 supersedes ADP/NEP 19-3362 and ADP/NEP 19-3376 in their entirety. Compliance will be determined under this ADP, not superseded approvals. Existing approval conditions for units not affected by this project have been carried forward unchanged.
- 10.b. Emission Limits. State and local agencies cannot establish emission limits for nonroad engines, but may limit operation as necessary to protect ambient air quality standards. SWCAA limited visible emissions from the nonroad diesel engines to five percent opacity. Visible emissions should not exceed this level if the engines are operating properly. For the nonroad engines, SWCAA uses this as a surrogate indicator that the engines are in good repair (rather than a tailpipe emission standard otherwise precluded by 40 CFR 1074). This restriction is appropriate because if the engine is not maintained in good repair, emissions are likely to greatly exceed the expected emission level and could cause an exceedance of a state or federal ambient air quality standard.

Visible emissions from all other activities are limited to zero percent opacity because the material contains sufficient moisture, or can be wetted, to eliminate visible emissions during handling and grinding activities.

- 10.c. Operating Limits and Requirements. As discussed in Section 8, BACT requires that putrescible waste be removed from the site within one day (Saturdays excepted) of receipt unless circumstances beyond the control of the Permittee cause a delay, in which case contingency measures must be taken. An extra day was allowed for material received on Saturday (dedicated waste haulers like Waste Connections excepted) to avoid the extra expense and complication of scheduling waste transfers on Sunday. Similarly, active composting is not allowed at this site because the site is not designed for active composting and such activity has not been reviewed and approved by SWCAA. Compost that is beyond the "active" composting stage is allowed as defined by carbon dioxide evolution rates measured by standardized tests. Compost material at this stage of maturity does not need active management to prevent the generation of offensive odors and excessive emissions.
- 10.d. Monitoring and Recordkeeping. Sufficient monitoring and recordkeeping was established to document compliance with the annual emission limits and provide for general requirements (e.g. excess emission reporting, annual emission inventory submission). In addition, recording of maintenance activities that may impact emissions must be logged for each occurrence. This record allows the facility and SWCAA inspectors to ensure the

equipment is being properly maintained and investigate any complaints or excess emissions incidents.

The permit requires that the amount of green waste received and shipped off-site must be recorded for each day of operation. While this does not guarantee that specific wastes do not remain on-site beyond one day, it can be used to demonstrate the ability to prevent waste accumulation.

- 10.e. Reporting. The permit requires reporting of the annual air emissions inventory, and reporting of the data necessary to develop the inventory. Excess emissions must be reported immediately in order to qualify for relief from monetary penalty in accordance with SWCAA 400-107. In addition, prompt reporting was required because it allows for accurate investigation into the cause of the event and prevention of similar future incidents.

Relocation of the grinders must be logged so SWCAA can locate the units but does not need to be reported to SWCAA for each move because these units have a low potential to generate complaints or excess emissions.

## **11. START-UP AND SHUTDOWN/ALTERNATIVE OPERATING SCENARIOS/POLLUTION PREVENTION**

- 11.a. Start-up and Shutdown Provisions. Pursuant to SWCAA 400-081 "Start-up and Shutdown", technology-based emission standards and control technology determinations must take into consideration the physical and operational ability of a source to comply with the applicable standards during start-up or shutdown. Where it is determined that a source is not capable of achieving continuous compliance with an emission standard during start-up or shutdown, SWCAA will include appropriate emission limitations, operating parameters, or other criteria to regulate performance of the source during start-up or shutdown.

This source is capable of achieving continuous compliance with all applicable requirements; therefore, no startup or shutdown provisions were included in the Air Discharge Permit.

- 11.b. Alternate Operating Scenarios. SWCAA conducted a review of alternate operating scenarios applicable to equipment affected by this permitting action. The permittee did not propose or identify any applicable alternate operating scenarios. Therefore, none were included in the approval conditions.
- 11.c. Pollution Prevention Measures. SWCAA conducted a review of possible pollution prevention measures for the facility. No pollution prevention measures were identified by either the permittee or SWCAA separate or in addition to those measures required under BACT considerations. Therefore, none were included in the approval conditions.



## 12. EMISSION MONITORING AND TESTING

Initial or ongoing testing of the engines was not required because these are nonroad engines not subject to permitted emission limits.

## 13. FACILITY HISTORY

McFarlane's Bark has reportedly been operating at this site since 1983.

- 13.a. Previous Permitting Actions. The following past permitting actions have been taken by SWCAA for this facility:

Permit	Application	Date Issued	Description
<b>19-3376</b>	CL-3103	12/10/2019	Approval for portable wood grinder (Plant 2).
<b>19-3362</b>	CL-3092	9/23/2019	Approval for portable wood grinder (Plant 1).

Approvals in bold have been superseded or are no longer active with issuance of ADP 24-3661.

- 13.c. Compliance History. A search of source records on file at SWCAA did not identify any outstanding compliance issues at this facility. NOV 11308 was issued September 18, 2024 for exceeding the VOC permitting threshold without a permit. This violation is addressed by this permitting action and is no longer outstanding.

## 14. PUBLIC INVOLVEMENT OPPORTUNITY

- 14.a. Public Notice for ADP Application CL-3284. Public notice for ADP application CL-3284 was published on the SWCAA website for a minimum of fifteen (15) days beginning on December 27, 2024.
- 14.b. Public/Applicant Comment for ADP Application CL-3284. SWCAA did not receive specific comments, a comment period request, or any other inquiry from the public or the applicant regarding ADP application CL-3284. Therefore, no public comment period was provided for this permitting action.
- 14.c. State Environmental Policy Act. This permitting action places additional restrictions on existing activities by amending and superseding existing permits, and does not approve any increase in emissions, new equipment, or new activities. As such, this permitting action will not have a material adverse impact on the environment and therefore the action is exempt from SEPA review under WAC 197-11-800(13)(i).