

# Notice of Construction (NOC) Worksheet



<b>Source:</b> Darling Ingredients Inc	<b>NOC Number:</b> 12348
<b>Installation Address:</b> 2041 Marc St   Tacoma, WA 98421	<b>Registration Number:</b> 10076
<b>Contact Name:</b> Jon Elrod	<b>Contact Email:</b> <a href="mailto:jelrod@darlingii.com">jelrod@darlingii.com</a>
<b>Applied Date:</b> 05/03/2023	<b>Contact Phone:</b> (859) 344-2201
<b>Engineer:</b> Ralph Munoz	<b>Inspector:</b> Rick Woodfork

## A. DESCRIPTION

### For the Order of Approval:

Meat Rendering Operation consisting of a total enclosed building under negative pressure controlled by a 125,000 cfm air scrubber. One Dupps Supercookor Model 260U controlled by One Air-cooled condenser system, One 15,000 cfm scrubber and a final 18 MMbtu/hr Thermal Oxidizer. Raw material receiving pit which is located inside a building that is negative pressure controlled. Finished protein meal storage silo equipped with bin vent filters located outside the building.

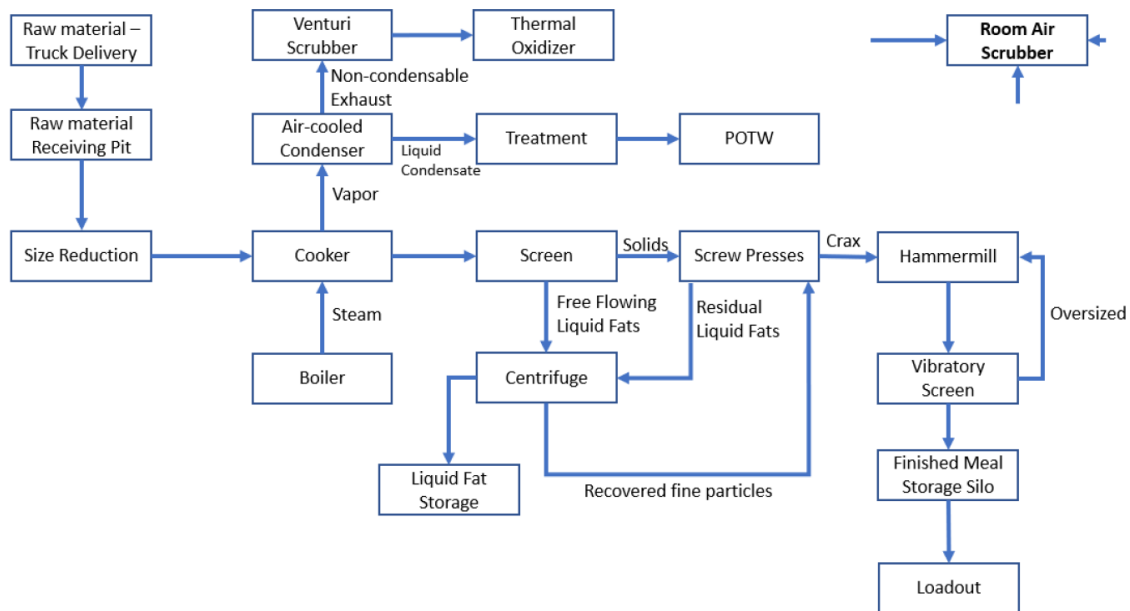
### Additional Information (if needed):

Darling Ingredients Inc. (Darling) is proposing to construct and operate a new meat rendering facility in Tacoma, Washington, to replace the existing rendering plant that was destroyed by a fire in September 2022. This existing Meat Rendering facility was permitted by the Agency under existing Order of Approval. With the proposed construction, Darling will provide service for the regional food processors, grocers, butchers, restaurants, and slaughter operations by providing an avenue for their byproducts to be managed in a more environmentally friendly manner compared to disposing them to the landfills.

A process flow diagram of the facility was provided with the application:

Darling Ingredients Inc.

**Figure 1-2: Rendering Operation Process Flow Diagram**



#### Meat Rendering operation:

The proposed rendering operation will start with raw materials for the rendering process being delivered to the facility in trucks and unloaded to the raw material receiving pit. From the receiving pit, the raw materials are reduced in size to 1"-2" pieces and then pumped into the cooker (Supercookor 260U). The cooker uses steam heat from the existing permitted boiler (NOC 8629) to evaporate moisture and promote separation of the fat (liquid component) from the protein (solid component). The heated mixture from the cooker flows to the screen to separate free-flowing liquid fat from the solids.

The free-flowing liquid fats from the screen are routed to a centrifuge for recovery of fine particles from the liquids, and then pumped into liquid fat storage. The solids from the screen are conveyed and discharged into one of the two screw presses, where residual liquid fats are further removed from the solids. The residual liquid fats from the screw presses are routed to a centrifuge for recovery of fine particles. The recovered fine particles from the liquids are discharged into one of the two screw presses, along with the solids from the screen. The resulting pressed solids (crax) from the screw presses are then conveyed to the protein grinding system to be processed into finished protein meal.

The vapor from the cooking process is vented to an air-cooled condenser, where water is recovered as condensate. The liquid condensate is sent for treatment and discharged to the POTW. The non-condensable exhaust from the condensing system is ducted to the odor control system, which consists of a 15,000-cfm venturi scrubber and an 18 MMBtu thermal oxidizer (TO), which is equipped with heat recovery capability. This odor control system is designed for control of high intensity point sources from the rendering operation. In addition, the processing room and grinding room will be controlled by a 125,000-cfm room air scrubber, which is designed for control of fugitive emission odors in the room air.

### Protein Grinding Operation:

The Protein Grinding, Screening and Storage Operation receives crax from the meat rendering operation. The crax is ground by a hammermill and conveyed to a vibratory screen to produce the finished protein meal. The emissions from the protein grinding, screening and material handling operation are controlled by the room air scrubber to minimize particulate matter emissions. The finished protein meal is conveyed to the finished protein meal storage silo via two screw conveyors and a bucket elevator. The finished protein meal storage silo is equipped with bin vent filters serving as PM emission control from the loading of the storage silo. During the finished protein meal storage silo loadout process, the finished protein meal is transferred from the storage silo and loaded into trucks, containers, or supersacks within the meal loadout bay. The loading point is equipped with a chute to minimize PM emissions.

## B. DATABASE INFORMATION

Source: 10076 - Darling Ingredients Inc. X

Basic Equipment

Count: 7

Reg	Name	Item #	NC/Notification #	BE Code	Year Installed	Units Installed	Rated Capacity	Rated Units	Primary
10076	Darling Ingredients...	1	12348	49 - rendering (cooker, screen, drainer, elevator, presser, centrif...	2024	1	98.00	Ton/Day	
10076	Darling Ingredients...	2	12348	49 - rendering (cooker, screen, drainer, elevator, presser, centrif...	2024	1	500.00	Ton/Day	
10076	Darling Ingredients...	3	12348	49 - rendering (cooker, screen, drainer, elevator, presser, centrif...	2024	1			
10076	Darling Ingredients...	8	8629	6 - boiler, water heater or oil heater		1	26.80	Mbtu	1 - Nat
10076	Darling Ingredients...	9	11901	6 - boiler, water heater or oil heater	2019	1	26.80	Million BTU/Hr	1 - Nat
10076	Darling Ingredients...	10	12348	61 - storage tank	2024	1			
10076	Darling Ingredients...	11	12348	60 - storage silo/bin	2024	1			

Comment: Custom built Wet Millscreen,centrifuge (Rendering Equipment), all conducting inside enclosed building

Control Equipment

Count: 3

Reg	Name	Item #	NC/Notification #	CE Code	Year Installed	Units Installed	Rated Capacity	Rated Units	Rated Exhaust Flow...	NOC Not
10076	Darling Ingredients...	1	12348	112 - Afterburner	2023	1	10000.00	Acfm	10000.00	
10076	Darling Ingredients...	2	12348	141 - Wet scrubber	2024	1	100000.00	CFM	100000.00	
10076	Darling Ingredients...	3	12348	53 - Venturi scrubber	2024	1	15000.00	CFM	15000.00	

Comment: Process Combustion Corp (dual fuel but only permitted for Natural gas) FD68

New NSPS due to this NOCOA?	No
New NESHAP due to this NOCOA?	No
New Synthetic Minor due to this NOCOA?	No

Source already subject to NSPS Dc for existing boiler covered under another NOC. Not evaluated with this application.

## C. NOC FEES AND ANNUAL REGISTRATION FEES

### NOC Fees:

Fees have been assessed in accordance with the fee schedule in Regulation I, Section 6.04. All fees must be paid prior to issuance of the final Order of Approval.

Fee Description	Cost	Amount Received (Date)
Filing Fee	\$ 1,550	
Equipment	6 x 1000\$	
-Cooker	5000\$	
-Raw Material Handling (grinding, screening, silos, etc)		
-15,000 cfm scrubber		
-125,000 cfm scrubber		
-18 MMBtu/hr Thermal Oxidizer		
SEPA (DNS)	\$1,200	
Modeling review	\$1,500	
Public Notice (additional fees collected after public notice ends)	\$750	
Public Hearing	\$2,500	
Filing received		\$ 1,550 (paid)
Additional fee received		\$10,950 (Paid)
<b>Total</b>		

Invoice paid 5/9/24, also \$1,300 fees paid for public notice publications

#### Registration Fees:

Registration fees are assessed to the facility on an annual basis. Fees are assessed in accordance with Regulation I, Section 5.07. The boiler from Subpart Dc outlined in the invoice below is covered under another NOC and not evaluated under this application.

Site Address: *Darling Ingredients Inc*  
2041 Marc St, Tacoma, WA 98421

The annual registration fee is required by Washington State law and Puget Sound Clean Air Agency's Regulation I.

Facility Fees and Applicable Regulations	Charges
<b>Base Fee for Registered Sources. Reg I, 5.07(c)</b>	\$ 1,150.00
Reg I, 5.03(a)(1) - Facilities subject to federal emission standards (Title 40 CFR)	
Reg I, 5.03(a)(4)(C) - Facilities with fuel burning equipment	
Reg I, 5.03(a)(5) - Facilities with gas or odor control equipment ( $\geq 200$ cfm)	
Reg I, 5.03(a)(8)(J) - Facilities with rendering operations	
<b>Additional Fees:</b>	
Reg I, 5.07(c)(1) - 40 CFR 60 Subpart Dc	\$ 2,100.00
	<b>\$ 3,250.00</b>
<b>Fee Totals</b>	
<b>TOTAL REGISTRATION FEE</b>	<b>\$ 3,250.00</b>
<i>The Total Registration Fee is due by January 03, 2022. If unpaid after January 03, 2022, the facility may be subject to enforcement action with civil penalties (Reg I, 5.07(b)).</i>	

#### D. STATE ENVIRONMENTAL POLICY ACT (SEPA) REVIEW

State Environmental Policy Act (SEPA) review was conducted in accordance with Regulation I, Article 2. The SEPA review is undertaken to identify and help government decision-makers, applicants, and the public to understand how a project will affect the environment. A review under SEPA is required for projects that are not categorically exempt in WAC 197-11-800 through WAC 197-11-890. A new source review action which requires a NOC application submittal to the Agency is not categorically exempt.

The applicant originally submitted a completed Environmental checklist that is included below.

Pages 25-41



The City of Tacoma was consulted for comments on 10/9/23 and replied that they are considering the new construction as “repair” and therefore below the SEPA thresholds. The City of Tacoma informed us that no permits would be required and that PSCAA could remain SEPA Lead as a result.

This project entails the replacement of old equipment with new equipment. The site is already developed and has been in use as a rendering facility for decades. The Agency issued Determinations of Nonsignificance for previous increases in cooking capacity at the facility, with NOCs 3372 and 3741. The cooker installed under NOC 3741 was rated at approximately 26,000 lb/hr, on a production (output) basis. The cooker to be installed under NOC 12348 does not have a higher cooking capacity than the previous cooker, though in this review, capacities are given on an input basis, which includes moisture. The permitted capacity in this Order of Approval of 500 tons per day on an input basis (equal to 41,666 lb/hr) is essentially equivalent to the previous rated capacity of 26,000 lb/hr on an output basis, the difference being attributable to the moisture that is cooked off in the rendering process. Additionally, the applicant is requesting no changes to the existing boiler that is the heat source for the cooker. It is clear that there is no increase in production beyond what was reviewed under NOC 3741, and there is no change in environmental impacts compared to what was reviewed under NOC 3741; therefore, the Determination of Nonsignificance that was issued with NOC 3741 covers this proposed cooker replacement.

An email was sent to the source asking about the size and throughput of the original cooker under 3741, Jon Elrod responded for the source with:



RE\_SEPA checklist for  
cooker replacement.r

The original DNS for 3741 is shown here:



3741-dns.pdf

## **E. TRIBAL CONSULTATION**

On November 21, 2019, the Agency's Interim Tribal Consultation Policy was adopted by the Board. Criteria requiring tribal consultation are listed in Section II.A of the policy and include establishment of a new air operating permit source, establishment of a new emission reporting source, modification of an existing emission reporting source to increase production capacity, or establishment or modification of certain equipment or activities. In addition, if the Agency receives an NOC application that does not meet the criteria in Section II.A but may represent similar types and quantities of emissions, the Agency has the discretion to provide additional consultation opportunities.

The Agency identified that this NOC application meets one of the criteria in the Agency's Interim Tribal Consultation Policy, adopted by the Board on November 21, 2019. This facility is a rendering plant which is one of the listed categories of the policy in number 4.

In accordance with the policy, the Agency notified each tribe within the Agency's jurisdiction on August 1, 2023, of the intent to hold a consultation. No tribe requested consultation with the Agency.

On December 11, 2023, the Agency notified each tribe that the Agency would be proceeding with the final steps to issue the conditional approval of this Notice of Construction application.

## **F. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REVIEW**

### **Best Available Control Technology (BACT)**

New stationary sources of air pollution are required to use BACT to control all pollutants not previously emitted, or those for which emissions would increase as a result of the new source or modification. BACT is defined in WAC 173-400-030 as, "an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under Chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each pollutant."

An emissions standard or emissions limitation means "a requirement established under the Federal Clean Air Act or Chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment, work practice, or operational standard adopted under the Federal Clean Air Act or Chapter 70.94 RCW."

### Best Available Control Technology for Toxics (tBACT)

New or modified sources are required to use tBACT for emissions control for TAP. Best available control technology for toxics (tBACT) is defined in WAC 173-460-020 as, “the term defined in WAC 173-400-030, as applied to TAP.”

#### Similar Permits

The Agency has not issued any recent permits like this type of permit application. All existing similar permits the Agency has were either no conditions or no BACT/RACT analysis:

Source	Control	BACT
Order of Approval No. 3372: Rendering plant with one Dupps 900 Cooker and other rendering equipment. (Approved 1989).	Cooker controlled by venturi scrubber and incineration. Room air scrubbers to control fugitive odor.	No specific conditions.
Order of Approval No. 3741: Dupps 1800 cooker to replace cooker under NOC 3372. Now Darling Industries (Approved 1991)	Cooker controlled by venturi scrubber and incineration. Room air scrubbers to control fugitive odor.	No specific conditions. Replacement of cooker approved by NOC 3372.
Order of Approval No 1655: Duke turnkey continuous rendering system consisting of one oxyflow system 300 with supporting chemical and electrical accessories. (Approved 1976)	Cooker controlled by condenser and packed bed scrubber	No specific conditions.
Order of Approval No 2988. SBECO Incinerator with single pass heat recovery boiler.	Cooker controlled by condenser and incinerator.	Follow “Raw Materials Trucks and/or Trailers Handling Procedures” at all times.
Order of Approval 7092. Rendering recycling plant with scrubber	Packed Bed Scrubber	Use of a scrubber system with monitoring for pH and pressure drop.

#### Other Regulatory Agencies BACT

Source	Control	BACT
Outdated SJVAPCD BACT Guideline 8.3.2 - Animal Matter Rendering Plant (2/21/1998)	Scrubber and Incineration	<p>Use of an odor scrubber with a particulate removal system that consists of a particulate scrubber, shell and tube condenser, a Venturi scrubber, a cyclone, an air cooled condenser, and a contact condenser or a combination thereof with a minimum overall control of 95%, or</p> <p>Thermal oxidizer utilizing natural gas with a minimum chamber temperature of 1,400°F and minimum retention time of 1.0 seconds with a particulate removal system that consists of a particulate scrubber, shell and tube condenser, a Venturi scrubber, a cyclone, an air cooled condenser, and a contact condenser or a combination thereof with a minimum overall control of 95%.</p>
SJVAPCD Rule 4104 – Reduction of Animal Matter (12/17/1992)	Incineration	All gases, vapors, and gas-entrained effluent from any article, machine, equipment or other contrivance used for the reduction of animal matter must be incinerated at temperatures of not less than 1,200 °F for a period of not less than 0.3 seconds, or processed in such a manner determined by the APCO to be equally or more effective for the purpose of air pollution control
Bay Area AQMD Reg 12 Rule 2 – Rendering Plants	Incineration	All gases, vapors, and gas-entrained effluent from the reduction of animal matter must be incinerated at a temperature of not less than 650 °C (1,202 °F) for a period of not less than 0.3 seconds, or processed in a manner which is equally or more effective for the purpose of air pollution odor control, as determined by the APCO
Sacramento Metropolitan AQMD Rule 410 – Reduction of Animal Matter (amended 8/3/77)	Incineration	All gases, vapors, and gas-entrained effluent from any article, machine, equipment or other contrivance used for the reduction of animal matter must be incinerated at temperatures of not less than 650 °C (1,202 °F) for a period of not less than 0.3 seconds, or processed in such a manner determined by the APCO to be equally or more effective for the purpose of air pollution control



SCAQMD BACT Guidelines Part B – Rendering Processing Equipment (1988)	Incineration	Vent to Afterburner or Boiler Fire Box ( $\geq 0.3$ sec. Retention Time at $\geq 1,200$ °F) (1988)  Rendering processing equipment includes crax pressing, filtering, centrifuging, evaporators, cookers, dryers, and grease and blood processing.
SCAQMD Rule 472 – Reduction of Animal Matter	Incineration	All gases, vapors, and gas-entrained effluent from any equipment used for the reduction of animal matter must be incinerated at temperatures of not less than 650 °C (1,202 °F) for a period of not less than 0.3 seconds, or processed in such a manner determined by the APCO to be equally or more effective for the purpose of air pollution control
SCAQMD Rule 472 – Odors from rendering operations		-Implement odor BMP (Best management practices)  -Permanent total enclosure of operation in Closed system , odor control devices used on total enclosures not be less than: 70% for Nitrogen 70% for Sulfur Compounds  -Waste water treatment shall be operated in the permanent closed system
Ventura County APCD Rule 58 – Reduction of Animal Matter (Rev 1972)	Incineration	All gases, vapors, and gas-entrained effluent from any article, machine, equipment or other contrivance used for the reduction of animal matter must be incinerated at temperatures of not less than 1,300 °F) for a period of not less than 0.4 seconds, or processed in such a manner determined by the APCO to be equally or more effective for the purpose of air pollution control

TCEQ Rendering: High Intensity Odors from Cookers and Pressers (2/19/2019)	Scrubbers	Odor: Building under negative pressure and air streams routed to a condenser or venturi scrubber followed by two packed bed or two packed tower scrubbers. The scrubbers may use sodium hydroxide, chlorine dioxide, or sodium hypochlorite, maintain a pH of 11 and 10 ppm residual chlorine concentration, and maintain 30 room air changes per hour on the cooking room. Instead of the above, the air stream may be routed to a condenser/venturi scrubber followed by the boiler firebox for incineration when the boiler is on high fire only. The temperature of vapors entering a packed bed or packed tower scrubber cannot exceed 130 Degrees Fahrenheit; accepted chemicals are chlorine dioxide, sodium hypochlorite, sodium hydroxide and ActXone
SJVAPCD Authority to Construct C-2282 new rendering plant	Venturi/packed bed scrubber and RTO in series and room air scrubber.	<p>Rendering Plant Processing Equipment:</p> <p>PM10: Use of a particulate removal system that consists of a venturi scrubber, condenser(s), and a packed bed scrubber in series with a thermal oxidizer operating with a minimum chamber temperature of at least 1,400 °F and minimum retention time of 1.0 seconds</p> <p>VOC: Use of a scrubbing system in series with a natural gas-fired thermal oxidizer with a minimum chamber temperature of 1,400 °F and a minimum retention time of 1.0 seconds</p>

A list of recently issued permits for SJVAPCD was located in an existing worksheet posted online:

Control for Emissions Captured from Rendering Operation Processing Equipment		
Facility Name (Facility ID)	Location	Rendering Operation Processing Equipment Control Device
Baker Commodities, Inc (C-72)	Fresno, CA	Thermal Oxidizer with minimum temperature of 1,200 °F and minimum retention time of 0.57 seconds
Darling International Inc (C-406)	Fresno, CA	Thermal Oxidizer with minimum temperature of 1,200 °F and minimum retention time of 0.5 seconds
Darling International Inc (N-2107)	Turlock, CA	Thermal Oxidizer with minimum temperature of 1,400 °F and minimum retention time of 1 second
Foster Foods (N-1252)	Livingston, CA	Thermal Oxidizer with minimum temperature of 1,400 °F and minimum retention time of 1 second
Yosemite Foods Inc (N-164)	Stockton, CA	Wet Scrubbers

### Analysis

There are three emissions sources that will be evaluated here for the Rendering Plant BACT determination; The Rendering Plant Processing Equipment, the Rendering Plant Room Air, and the Animal Matter Staging area located outside the building.

The Rendering Plant processing equipment is proposed to control emissions of PM (PM<sub>10</sub> and PM<sub>2.5</sub>), VOCs, HAPs/TAPs and odors using a particulate removal system that consist of an air cooled condenser (where water is recovered as condensate), a 15,000-cfm venturi scrubber and an 18 MMBtu thermal oxidizer (TO). The liquid condensate will be sent for onsite pretreatment and discharged to the local POTW. The onsite pretreatment process consists of a rotary drum screen, followed by a dissolved air floatation (DAF) unit, and then followed by an aeration tank. The final pretreatment water will be sent to an additional DAF Unit prior to being discharged to the local POTW. All processing equipment, except for the aeration tank, will be inside the negative pressure building that is routed to the room air scrubber. The aeration tank will be located outside the building but will be a closed tank that does not vent outside. The Agency has evaluated the wastewater treatment process located inside the building and has determined that as long as it remains inside the building it will be considered exempt from permitting; with the exception of the aeration tank located outside the building. This tank will need to be closed and not vented to the atmosphere at any time and will get a permit condition to address this tank specifically.

The Rendering Plant Room air proposed to be controlled by a 125,000 cfm room air scrubber, which is designed to control PM (PM<sub>10</sub> and PM<sub>2.5</sub>), VOC, HAPs/TAPs and odors.

### Rendering Plant Processing Area

As can be seen in the tables linked above, emissions from rendering plants are typically controlled well by Incineration using a thermal oxidizer or a regenerative thermal oxidizer. The most recent

permit reviewed for the purposes of BACT is the SJVAPCD Authority to Construct C-2282, which utilizes a scrubber, condenser, and thermal oxidizer with a minimum chamber temperature of 1,400 degrees F and a minimum retention time of 1.0 seconds – with minimum overall control efficiency of 95%. This will also be considered BACT For this project.

SJVAPCD identified BACT for PM emissions as the following:

- Use of an odor scrubber with a particulate removal system that consists of a particulate scrubber/venturi scrubber and condensers with a minimum overall control of 95%, or
- Use of a particulate removal system that consists of a particulate scrubber/venturi scrubber and condenser(s) in series with a natural gas-fired thermal oxidizer with a minimum chamber temperature of 1,400 °F and a minimum retention time of 1.0 seconds with a minimum overall control of 95% (Achieved in Practice)

The applicant has proposed controls equal to the second option shown above, which should satisfy PM BACT for this project.

SJVAPCD identified the following as BACT for VOC Emissions

- Use of a scrubbing system in series with a natural gas-fired thermal oxidizer with a minimum chamber temperature of 1400 F and a minimum retention time of 1.0 seconds (>95% control).

It is expected based on previous testing knowledge and other permit review that the control efficiency of a Thermal Oxidizer alone would have a control efficiency of 95% control; therefore, the use of a scrubber in series with the thermal oxidizer is considered to be GREATER than 95%. The applicant has proposed control technology that will meet this VOC BACT determination from SJVAPCD.

**Rendering Plant Air Room Emissions:**

Emissions generated by the Rendering Plant Processing area that are not captured and sent to the primary control devices (venturi scrubber and Thermal Oxidizer) need to be controlled as well. Emissions from this process include PM (PM10 and PM2.5), VOCs, HAPs/TAPs and Odors.

The most recent permit issued for SJVPCD identified the following as BACT:

- a) Use of a closed system as defined in SCAQMD Rule 415 or b) rendering operations in a building kept under negative pressure and vented to a wet scrubber or alternative technology that reduces H2S emissions by at least 70%

**SCAQMD Rule 415 - Odors from Rendering Facilities** specifies requirements to reduce odors from rendering facilities, including odors from nitrogen and sulfur compounds emitted from rendering facilities, but does not specifically address VOC emissions from rendering operation room air. However, the requirements of this rule that could potentially reduce VOC emissions from rendering operation room air will be considered for purposes of this analysis. To control odors from rendering

operations, SCAQMD Rule 415 requires the use of a closed system or a permanent total enclosure. SCAQMD Rule 415 defines a closed system as “a system handling any combination of solids, liquids, vapors, and air at a rendering facility, in which odors are contained within the system” and requires each component of a closed system to be maintained in a manner to minimize leaks, requires material conveyers, troughs, bins, and hoppers to be completely enclosed except for doors and panels required for maintenance and personnel access, and requires mating surfaces on doors, access panels, and ductwork and air gaps in the system to be sealed with gasket material or caulk. Any alternative to a closed system must be approved by the SCAQMD executive officer. SCAQMD Rule 415 defines a permanent total enclosure as “an enclosure having a permanently installed roof and exterior walls which are constructed of solid material, and completely surround one or more odor-generating sources such that all odors from processes conducted within the enclosure are contained therein.” SCAQMD Rule 415 requires use of an odor control system in conjunction with a permanent total enclosure. The odor control system must be designed and operated to control fugitive odors from a permanent total enclosure and raw material receiving and must have minimum control efficiency of 70% for nitrogen compounds and 70% for sulfur compounds, but no control efficiency is required for VOC emissions.

Although Rule 415 does not specifically address control efficiency when using a permanent total enclosure for VOC or other TAPs/HAPs, it can be assumed based on historical permitting that the scrubber technologies control on nitrogen and sulfur compounds is comparable to its control on VOC and HAPs/TAPs. The other option would be for the source to keep their rendering operations building under constant negative pressure when operating and vent the emissions to a wet scrubber.

**Rendering staging of raw material:**

There were no recent permits issued from the Agency for the staging area or from trucks entering and leaving the facility. The staging area is only used when the amount of feedstock that comes to Darling is more than they can process on a given day. This animal matter then starts to degrade and can lead to odors.

Similar source types that produce odors in the Agency jurisdiction are sources like Marijuana production facilities, asphalt plants, landfills, and wastewater treatment facilities. Each of these source categories must monitor for odor complaints at the facility and part of their BACT analysis includes maintaining odors at their property boundary. Marijuana facilities must totally enclose their plants and vent them to an odor control device. BACT for this operation from the SJVAPCD permit mentioned above (Authority to Construct C-2282) is outlined below:

- No outside storage of raw material is allowed, except as otherwise specified in this permit. Trucks waiting their turn to unload within the 4-hour unload time limitation are not considered outside storage. [District Rule 4102]
- All material received shall be processed within 24 hours of receipt. Each delivery of material shall be monitored, and records shall be maintained to ensure that processing is performed within this time limit. [District Rules 2201 and 4102]

- If raw material cannot be processed within 24 hours of receipt, raw material shall be diverted to other facilities. No further deliveries shall be received until a 24 hour turnaround for raw material is achievable. [District Rule 4102]

These conditions will be placed in the permit as BACT for raw material receiving storage, except the facility will be allowed to unload within 8 hours instead of 4 hours as outlined above as this is a different in weather from the facility listed above and the Seattle area (Seattle does not reach temperatures of 110 F or more). No storage of raw material outside the negative pressure building will be allowed.

#### **TAPs/HAPs**

VOCs and PM are the primary air pollutants emitted from rendering. EPA AP-42 Chapter 9.5.3 Meat Rendering Plants identifies the major constituents which have been qualitatively identified to be “organic sulfides, disulfides, C-4 to C-7 aldehydes, trimethylamine, C-4 amines, quinoline, dimethyl pyrazine, other pyrazines, and C-3 to C-6 organic acids. In addition, lesser amounts of C-4 to C-7 alcohols, ketones, aliphatic hydrocarbons, and aromatic compounds.” Quantitative emission data is not presented. Of the specific constituents listed, only quinoline is classified as a HAP. Quinoline is not listed in WAC 173-460-150 and does not have an associated ASIL or SQER.

Due to the lack of quantitative data available as well as the varied product stream entering the facility and cooker, determining a reliable list of individual toxic air pollutants presents a challenge. The majority of TAPs identified and emitted as part of this application come from the result of reduced sulfur compounds in the form of H<sub>2</sub>S. The rest of the TAPs identified in this worksheet are from combustion of the emissions in the TO. These pollutants are identified below:

TAP
Acetaldehyde
Acrolein
Benzene
Ethyl Benzene
Formaldehyde
Hexane
Naphthalene
PAHs (excluding Naphthalene)
Propylene
Toluene
Xylenes (mixed)
H <sub>2</sub> S

#### **Recommendations**

BACT for VOCs, PM (PM<sub>10</sub> and PM<sub>2.5</sub>), and tBACT for organic volatiles generated from the rendering plant operations is outlined below:

- Use of a particulate removal system that consists of a particulate scrubber/venturi scrubber and condenser(s) in series with a natural gas-fired thermal oxidizer with a minimum

chamber temperature of 1,400 °F and a minimum retention time of 1.0 seconds with a minimum overall control of 95% (Achieved in Practice)

**Summary BACT/tBACT determination for the Rendering Process equipment**

Pollutant	Available Method That Meets BACT/tBACT
Total VOCs/Odors	<ul style="list-style-type: none"> <li>Use of a particulate removal system that consists of a particulate scrubber/venturi scrubber and condenser(s) in series with a natural gas-fired thermal oxidizer with a minimum chamber temperature of 1,400 °F and a minimum retention time of 1.0 seconds with a minimum overall control of 95%</li> </ul>
PM	

**Summary BACT/tBACT determination for Rendering Plant Room Air Emissions:**

Pollutant	Available Method That Meets BACT/tBACT
Total VOCs /Odors	<ul style="list-style-type: none"> <li>Use of a closed system as defined in SCAQMD Rule 415 or</li> <li>Conduct rendering operations in a building kept under negative pressure and vented to a wet scrubber</li> </ul>
PM	

**Summary BACT/tBACT determination for Rendering Staging area Raw material:**

Pollutant	Available Method That Meets BACT/tBACT
Total VOCs /Odors	<ul style="list-style-type: none"> <li>No outside storage of raw material is allowed, except as otherwise specified in this permit.</li> <li>All material received shall be processed within 24 hours of receipt. Each delivery of material shall be monitored, and records shall be maintained to ensure that processing is performed within this time limit.</li> </ul>
PM	

Pollutant	Available Method That Meets BACT/tBACT
	<ul style="list-style-type: none"><li>• If raw material cannot be processed within 24 hours of receipt, raw material shall be diverted to other facilities. No further deliveries shall be received until a 24 hour turnaround for raw material is achievable.</li></ul>



## G. EMISSION ESTIMATES

### Rendering Operation Emission calculations:

As discussed in detail above, the meat rendering operation involves the cooking of the raw material, which separates it into liquids and solids. The cooking process utilizes the steam from the boiler to render the raw material. The cooking process is expected to emit volatile organic compounds (VOCs), PM<sub>10</sub>, and reduced sulfur compounds. The exhaust from the cooking process is vented to a venturi scrubber, followed by a TO. The reduced sulfur compounds are expected to completely oxidize to sulfur oxides (SOX) by the TO.

The source was asked to provide a more detailed list of emissions that could occur from cooking animal matter; however, the cooker utilizes non-contact steam to evaporate moisture from the raw material stream. The cooked material is then sent for further processing for the separation of the fat and protein. Both fat and protein components are further processed to produce the finished fats and finished meal, respectively. The evaporated moisture/vapor from the cooking process is vented to an air-cooled condenser, where water and other condensable liquids are recovered as liquid condensate. The liquid condensate is then sent for on-site pretreatment and discharged to the POTW. The non-condensable exhaust stream from the condensing system is then sent to the odor control system (venturi scrubber and TO) for odor control. The proposed rendering operation will not incinerate any animal matter, and no animal matter will be sent to the incinerator for processing which means it is not expected to generate emissions of hydrochloric acid or other TAP/HAPs that may occur as part of incineration.

The venturi scrubber and thermal oxidizer (TO) system are designed for a combined reduction of VOC emissions by 99%. PM<sub>10</sub> emissions are expected from the droplets of fat released in the cooking process. In addition to rendering process emissions, the TO combusts natural gas fuel as supplemental fuel, which results in the emissions of nitrogen oxides (NO<sub>x</sub>), SO<sub>x</sub>, PM<sub>10</sub>, carbon monoxide (CO), and VOC. Emissions were calculated for the rendering operation using the emission factors from a rendering operation permitted recently by San Joaquin Valley Air Pollution Control District (SJVAPCD) for a similar operation (Project #1172884, Facility C-9251). ([Packet.pdf \(valleyair.org\)](#))

**Table 3-1: Criteria Pollutant Emission Factors – Rendering Operation – TO**

Criteria Pollutant	Emission Factor	Reference
NO <sub>x</sub>	0.0069 lb/ton of raw material	Proposed based on SJVAPCD Project #1172884, Facility C-9251
SO <sub>x</sub>	0.0335 lb/ton of raw material	
PM <sub>10</sub>	0.0033 lb/ton of raw material	
CO	0.0137 lb/ton of raw material	
VOC	0.0052 lb/ton of raw material	

As discussed in the BACT Section, the meat rendering operation is expected to result in reduced sulfur compound emissions in the form of hydrogen sulfide (H<sub>2</sub>S), which is a Toxic Air Pollutant (TAP). However, the TO will effectively convert the H<sub>2</sub>S to SO<sub>2</sub>. There are TAP emissions associated with the TO, which come from the combustion of natural gas. The TAP emission factors for the TO natural gas combustion are obtained from “Natural Gas Fired External Combustion Equipment” in the May 2001 update of the Ventura County Air Pollution Control District (VCAPCD) AB 2588 Combustion Emission Factors for units between 10 and 100 MMBtu/hr:

**Table 3-4: Toxic Air Pollutant Emission Factors – TO**

TAP	Emission Factor	Reference
Acetaldehyde	3.10E-03 lb/MMSCF	“Natural Gas Fired External Combustion Equipment” in the May 2001 update of VCAPCD AB 2588 Combustion Emission Factors
Acrolein	2.70E-03 lb/MMSCF	
Benzene	5.80E-03 lb/MMSCF	
Ethyl Benzene	6.90E-03 lb/MMSCF	
Formaldehyde	1.23E-02 lb/MMSCF	
Hexane	4.60E-03 lb/MMSCF	
Naphthalene	3.00E-04 lb/MMSCF	
PAHs (excluding Naphthalene)	1.00E-04 lb/MMSCF	
Propylene	5.30E-01 lb/MMSCF	
Toluene	2.65E-02 lb/MMSCF	
Xylenes (mixed)	1.97E-02 lb/MMSCF	

In addition to the venturi scrubber and TO, the fugitive emissions from the cooker room (along with the emissions from the protein grinding, screening and material handling calculated in the section below this) are vented to a room air scrubber.

Darling provided emissions estimates for this process using the emission factors for a rendering operation that are obtained from the recent San Joaquin Valley Air Pollution Control District (SJVAPCD) for a similar operation (Project #1172884, Facility C-9251).

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**Table 3-2: Criteria Pollutant Emission Factors – Rendering Operation – Room Air Scrubber**

Criteria Pollutant	Emission Factor	Reference
PM <sub>10</sub>	0.001 gr/dscf	SJVAPCD Project #1172884, Facility C-9251
VOC	3.2 ppmv as CH <sub>4</sub>	
H <sub>2</sub> S	0.75 ppmv	

$$PM_{10} \text{ PTE} = \frac{0.001 \text{ gr}}{1 \text{ ft}^3} \times \frac{1 \text{ lb}}{7,000 \text{ gr}} \times \frac{125,000 \text{ ft}^3}{\text{min}} \times \frac{60 \text{ min}}{1 \text{ hr}} \times \frac{24 \text{ hr}}{\text{day}} = 25.7 \frac{\text{lb}}{\text{day}}$$

$$VOC\ PTE = \frac{3.2\ ft^3\ VOC}{10^6\ ft^3} \times \frac{16\ lb - VOC}{lb - mol\ VOC} \times \frac{lb - mol}{379.5\ ft^3} \times \frac{125,000\ ft^3}{min} \times \frac{60\ min}{1\ hr} \times \frac{24\ hr}{day} = 24.3\ \frac{lb}{day}$$

$$H_2S\ PTE = \frac{0.75\ ft^3\ H_2S}{10^6\ ft^3} \times \frac{34\ lb - H_2S}{lb - mol\ H_2S} \times \frac{lb - mol}{379.5\ ft^3} \times \frac{125,000\ ft^3}{min} \times \frac{60\ min}{1\ hr} = 0.5\ \frac{lb}{hr}$$

Basis:

- PM<sub>10</sub> EF of 0.01 gr/dscf
- VOC as methane EF of 3.2 ppmv
- H<sub>2</sub>S EF of 0.75 ppm
- molar volume = 379.5 ft<sup>3</sup>/lb-mol
- VOC as methane with molecular weight of 16 lb/lb-mol
- H<sub>2</sub>S molecular weight of 34 lb/lb-mol

Protein Grinding, Screening, and Storage Operation emissions:

The solids or crax processing is expected to result in PM<sub>10</sub> emissions. The protein grinding, screening and material handling are vented to a room air scrubber with assumed 90% control efficiency (CE). Standard Environmental Protection Agency (EPA) AP-42 emission factors were used to estimate the PM emissions from the solids processing. Pursuant to EPA Air Pollution Control Technology Fact Sheet for

cyclones, the PM<sub>10</sub> CE range for a conventional single cyclone is 30-90%. The proposed criteria pollutant emission factors from the protein grinding, screening and material handling are summarized in Table 3-3

**Table 3-3: PM<sub>10</sub> Emission Factors – Protein Grinding, Screening and Storage Operation**

Activity <sup>1</sup>	PM <sub>10</sub> Emission Factor	Reference
Conveyor to Grinding Process	0.00008 lb/ton of solid	EPA AP-42, Table 9.9.1-2, Animal Feed Mills – Uncontrolled Shipping adjusted by room air scrubber (90% control)
Grinding	0.0335 lb/ton of solid	EPA AP-42, Table 9.9.1-2, Animal Feed mills – Hammermill – controlled by Cyclone, assuming 50% of PM is PM <sub>10</sub> and adjusted by room air scrubber (90% control)
Screening	0.0335 lb/ton of solid	EPA AP-42, Table 9.9.1-2, Animal Feed mills – Hammermill – controlled by Cyclone, assuming 50% of PM is PM <sub>10</sub> and adjusted by room air scrubber (90% control)

Activity <sup>1</sup>	PM <sub>10</sub> Emission Factor	Reference
Rerun Conveyors	0.00008 lb/ton of solid	EPA AP-42, Table 9.9.1-2, Animal Feed mills – Shipping – uncontrolled, adjusted by room air scrubber (90% control)
Storage Silo Conveyors	0.00008 lb/ton of solid	EPA AP-42, Table 9.9.1-2, Animal Feed mills – Shipping – uncontrolled, adjusted by room air scrubber (90% control)
Silo Loading	0.000008 lb /ton of solid	EPA AP-42, Table 9.9.1-2, Animal Feed Mills – Uncontrolled Shipping adjusted by bin vent (99% control)
Finished Meal Loadout	0.0008 lb /ton of solid	EPA AP-42, Table 9.9.1-2, Animal Feed Mills – Uncontrolled Shipping

TAP Emissions from the protein grinding, screening and material handling were not expected due to the guidance on food grade products and pre-cleaned material found in AP-42 Chapter 9.9. Pre cleaned grain materials and products are considered non-hazardous. Material that is pre-cleaned is considered to have had all PM<sub>10</sub> (dust/soil) removed, which would in turn would have eliminated the exposure to

heavy metals. Since the raw material is not expected to be covered by soil/dust, the PM<sub>10</sub> emissions from this process are considered non-hazardous and TAP emissions are not expected.

Using the above emission factors and the operating schedule – the facility provided Potential to Emit emissions below which were reviewed by the Agency for accuracy and completeness:

- Maximum daily throughput: 500 tons of raw material per day
- Maximum Room Air Scrubber exhaust flowrate; 125,000 cfm
- Maximum operating schedule: 24 hours per day and 365 days per year.

**Table 4-1: Criteria Pollutant PE - Rendering Operation - TO**

Criteria Pollutant	Daily PE	Annual PE
NO <sub>x</sub>	3.5 lbs/day	1,259 lbs/year
SO <sub>x</sub>	16.8 lbs/day	6,114 lbs/year
PM <sub>10</sub>	1.7 lbs/day	602 lbs/year
CO	6.9 lbs/day	2,500 lbs/year
VOC	2.6 lbs/day	949 lbs/year

Room Air Scrubber - 125,000 cfm		
Criteria Pollutant	Daily PE	Annual PE
PM <sub>10</sub>	25.7 lbs/day	9,386 lbs/year
VOC	24.3 lbs/day	8,864 lbs/year

**Table 4-3: Criteria Pollutant PE - Protein Grinding, Screening and Storage Op.<sup>2</sup>**

Criteria Pollutant	Daily PE (lb/day)	Annual PE (lb/year)
PM <sub>10</sub>	0.1 lbs/day	29 lbs/year

**Table 4-4: TAP PE - Rendering Operation – TO**

TAP	Hourly PE	Annual PE
Acetaldehyde	5.58E-05 lbs/hour	4.89E-01 lbs/year
Acrolein	4.86E-05 lbs/hour	4.26E-01 lbs/year
Benzene	1.04E-04 lbs/hour	9.15E-01 lbs/year
Ethylbenzene	1.24E-04 lbs/hour	1.09E+00 lbs/year
Formaldehyde	2.21E-04 lbs/hour	1.94E+00 lbs/year
Hexane	8.28E-05 lbs/hour	7.25E-01 lbs/year
Naphthalene	5.40E-06 lbs/hour	4.73E-02 lbs/year
PAH's (excl. naphthalene)	1.80E-06 lbs/hour	1.58E-02 lbs/year
Propylene	9.54E-03 lbs/hour	8.36E+01 lbs/year
Toluene	4.77E-04 lbs/hour	4.18E+00 lbs/year
Xylenes (mixed)	3.55E-04 lbs/hour	3.11E+00 lbs/year

Room Air Scrubber - 125,000 cfm		
TAP	Hourly PE	Annual PE
H <sub>2</sub> S	0.5 lbs/hour	4,415 lbs/year

<sup>2</sup> The emissions from transfer of materials from the conveyor to the grinding process, grinding, screening, transfer of materials at the rerun conveyors and transfer of materials from the conveyor to the storage silo are controlled by the room air scrubbers and are accounted for in the room air scrubber emissions. The emissions in Table 4.3 above only account for the remaining emissions from the operation.

A copy of the emission calculation sheet is attached:

  
Darling Tacoma  
Emissions Calcs NOC

Updated emission calculations for 125,000 cfm scrubber:

  
Darling Tacoma  
NOC 12348 RAS 125

## H. OPERATING PERMIT OR PSD

The Title V Air Operating Permit (AOP) program applicability for the entire source has been reviewed.

The facility is not a Title V air operating permit source because post project PTE remains below Title V applicability thresholds and criteria. The source is considered a “**natural minor**”.

## I. AMBIENT TOXICS IMPACT ANALYSIS

The estimated potential toxic air pollutant (TAP) emissions were calculated as outlined above in the emission calculation section. The results are presented again here:

**Table 4-4: TAP PE - Rendering Operation – TO**

TAP	Hourly PE	Annual PE
Acetaldehyde	5.58E-05 lbs/hour	4.89E-01 lbs/year
Acrolein	4.86E-05 lbs/hour	4.26E-01 lbs/year
Benzene	1.04E-04 lbs/hour	9.15E-01 lbs/year
Ethylbenzene	1.24E-04 lbs/hour	1.09E+00 lbs/year
Formaldehyde	2.21E-04 lbs/hour	1.94E+00 lbs/year
Hexane	8.28E-05 lbs/hour	7.25E-01 lbs/year
Naphthalene	5.40E-06 lbs/hour	4.73E-02 lbs/year
PAH's (excl. naphthalene)	1.80E-06 lbs/hour	1.58E-02 lbs/year
Propylene	9.54E-03 lbs/hour	8.36E+01 lbs/year
Toluene	4.77E-04 lbs/hour	4.18E+00 lbs/year
Xylenes (mixed)	3.55E-04 lbs/hour	3.11E+00 lbs/year

Room Air Scrubber - 125,000 cfm		
TAP	Hourly PE	Annual PE
H <sub>2</sub> S	0.5 lbs/hour	4,415 lbs/year

One pollutant left off the above table was for Ammonia emissions emitted through the room air scrubber as off gassing from the rendering operations; however, the ammonia emissions in the room air are expected to be negligible. The ammonia generated by the cooker is routed to the Thermal Oxidizer and is converted to NO<sub>x</sub> which has been accounted for in the emission factor for NO<sub>x</sub>. The ammonia potential to emit (PTE) was calculated based on the ammonia emission factors from USEPA's AP-42 Document Table 9.5.3-2 (Meat Rendering Plants). The estimated ammonia PTE based on the proposed 98 tons/day of finished meal, not accounting the reduction from the TO, is calculated as follows:

$$\text{Ammonia Emissions} = 0.6 \text{ lb/tons} \times 98 \text{ tons/day} = 58.8 \text{ lbs/day}$$

The SQER for ammonia is 500 lb/24-hour, which is higher than the ammonia PTE. Therefore, the ammonia emissions are not subject to modeling.

All other TAP emissions in the above table from the proposed project are below the SQER threshold limits found in WAC 173-460-150, except for Hydrogen Sulfide (H<sub>2</sub>S) which is emitted at 0.5 lbs per hour, while the SQER is listed as 0.15 lbs per any 24 hour period. Therefore, H<sub>2</sub>S is subject to Modeling to verify if emissions would exceed the ASIL for H<sub>2</sub>S (2.0 ug/m<sup>3</sup>).

Air dispersion modeling was conducted by the source using US EPA's AERMOD modeling computer software. AERMOD Version 22112 was used for this analysis. A newer version has since been released but the Agency has not asked the source to update modeling with the newest version since 22112 is adequate to model the above scenarios.

#### Meteorological data

AERMOD-specific meteorological (MET) data for the Tacoma Tideflats station was used for the dispersion modeling. A 5-year data set from 2012 through 2016 was obtained from PSCAA in a preprocessed format suitable for use in AERMOD.

#### Modeling options

Regulatory defaults were used with the "Rural" modeling option and "Elevated" terrain options. The facility is located in Tacoma near Commencement Bay. Due to the location of the facility near a waterway, the rural option was used in the analysis. Elevated terrain is assumed when the terrain height exceeds the source's stack elevation. Because there are receptors within the modeling grid area with slightly higher base elevations than the sources, the elevated terrain option was selected.

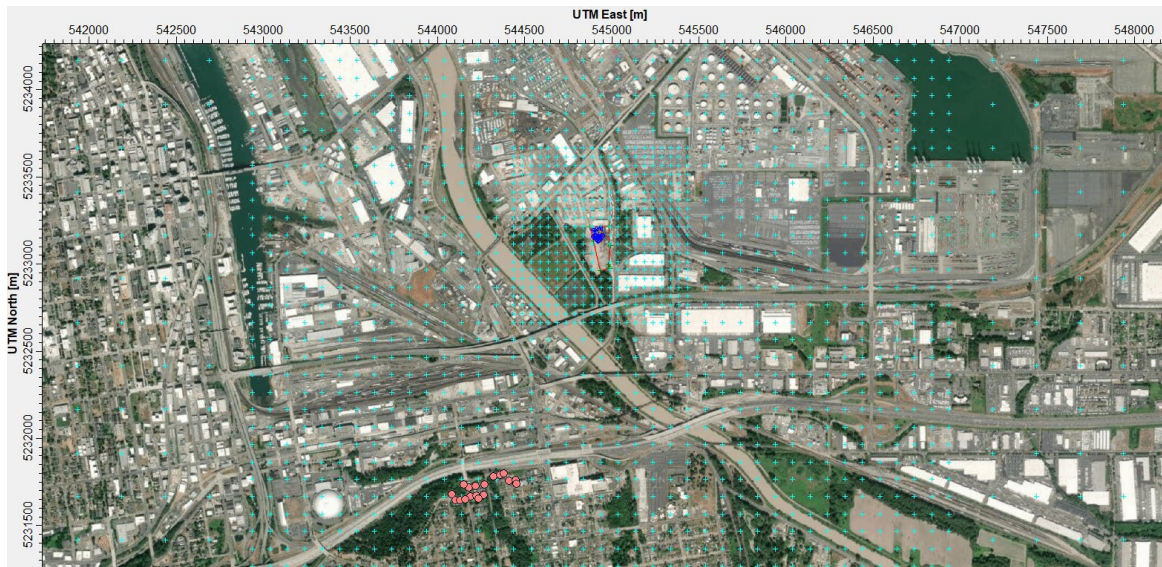
#### Building downwash

All significant buildings were included in the model, a figure was supplied with the application showing local buildings.

#### Receptor grid and modeling domain

Satellite maps within the AERMOD View™ program were used for visualizing the results of the health risk assessment (HRA) and developing the receptor grid. This program used the World Geodetic System 1984 (WGS84) zone 10 for displaying Universal Transverse Mercator (UTM) coordinates and was used throughout the project. The Grid and discrete receptors are shown below:





Source characteristics used

Parameter	Processing Area (Room Air)
Existing Release	Room Air Scrubber
Source Type	Point
Release Height (ft)	45
Stack Diameter (ft)	6.0
Stack Temperature (F)	80
Flow Rate (acfm)	125,000

The results of the modeling are shown below and indicate that the facility will comply with the WAC ASIL threshold for H<sub>2</sub>S which is 2.0 ug/m<sup>3</sup>. The results indicate that the concentrations at all receptors are below the ASIL threshold. The point of maximum impact (PMI) will occur to the west of the facility along the fenceline of a neighboring business. The peak residential concentration will occur to the southwest of the facility.

**Table 3: H<sub>2</sub>S Modeling Results**

Substance	Emission rate (lb/hr)	Concentration (µg/m <sup>3</sup> )	
		PMI	Resident
H <sub>2</sub> S	0.40	0.89	0.31

## J. APPLICABLE RULES & REGULATIONS

### Puget Sound Clean Air Agency Regulations

**SECTION 5.05 (c):** The owner or operator of a registered source shall develop and implement an operation and maintenance plan to ensure continuous compliance with Regulations I, II, and III. A

copy of the plan shall be filed with the Control Officer upon request. The plan shall reflect good industrial practice and shall include, but not be limited to, the following:

- (1) Periodic inspection of all equipment and control equipment;
- (2) Monitoring and recording of equipment and control equipment performance;
- (3) Prompt repair of any defective equipment or control equipment;
- (4) Procedures for startup, shut down, and normal operation;
- (5) The control measures to be employed to ensure compliance with Section 9.15 of this regulation; and
- (6) A record of all actions required by the plan.

The plan shall be reviewed by the source owner or operator at least annually and updated to reflect any changes in good industrial practice.

**SECTION 6.09:** Within 30 days of completion of the installation or modification of a stationary source subject to the provisions of Article 6 of this regulation, the owner or operator or applicant shall file a Notice of Completion with the Agency. Each Notice of Completion shall be submitted on a form provided by the Agency, and shall specify the date upon which operation of the stationary source has commenced or will commence.

**SECTION 9.03:** (a) It shall be unlawful for any person to cause or allow the emission of any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour, which is:

- (1) Darker in shade than that designated as No. 1 (20% density) on the Ringelmann Chart, as published by the United States Bureau of Mines; or
- (2) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Section 9.03(a)(1).

(b) The density or opacity of an air contaminant shall be measured at the point of its emission, except when the point of emission cannot be readily observed, it may be measured at an observable point of the plume nearest the point of emission.

(c) This section shall not apply when the presence of uncombined water is the only reason for the failure of the emission to meet the requirements of this section.

**SECTION 9.09:** General Particulate Matter (PM) Standard. It shall be unlawful for any person to cause or allow the emission of particulate matter in excess of the following concentrations:  
Equipment Used in a Manufacturing Process: 0.05 gr/dscf

**SECTION 9.11:** It shall be unlawful for any person to cause or allow the emission of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.

**SECTION 9.13:** It shall be unlawful for any person to cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant which causes detriment to health, safety or welfare of any person.

**SECTION 9.15:** It shall be unlawful for any person to cause or allow visible emissions of fugitive dust unless reasonable precautions are employed to minimize the emissions. Reasonable precautions include, but are not limited to, the following:

- (1) The use of control equipment, enclosures, and wet (or chemical) suppression techniques, as practical, and curtailment during high winds;
- (2) Surfacing roadways and parking areas with asphalt, concrete, or gravel;
- (3) Treating temporary, low-traffic areas (e.g., construction sites) with water or chemical stabilizers, reducing vehicle speeds, constructing pavement or rip rap exit aprons, and cleaning vehicle undercarriages before they exit to prevent the track-out of mud or dirt onto paved public roadways; or
- (4) Covering or wetting truck loads or allowing adequate freeboard to prevent the escape of dust-bearing materials.

**REGULATION I, SECTION 9.20(a):** It shall be unlawful for any person to cause or allow the operation of any features, machines or devices constituting parts of or called for by plans, specifications, or other information submitted pursuant to Article 6 of Regulation I unless such features, machines or devices are maintained in good working order.

### **Washington State Administrative Code**

WAC 173-400-040(3): Fallout. No person shall cause or allow the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

WAC 173-400-040(4): Fugitive emissions. The owner or operator of any emissions unit engaging in materials handling, construction, demolition or other operation which is a source of fugitive emission:

- (a) If located in an attainment area and not impacting any nonattainment area, shall take reasonable precautions to prevent the release of air contaminants from the operation.

WAC173-400-111(7): Construction limitations.

- (a) Approval to construct or modify a stationary source becomes invalid if construction is not commenced within eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the eighteen-month period upon a satisfactory showing by the permittee that an extension is justified.

### **Federal**

There are no federal rules under 40 CFR part 60, Part 61, or Part 63 that are applicable to Rendering facilities.

## K. PUBLIC NOTICE

This project does not meet the criteria for mandatory public notice under WAC 173-400-171(3). Criteria requiring public notice includes, but is not limited to, a project that exceeds emission threshold rates as defined in WAC 173-400-030 (e.g. 40 tpy NO<sub>x</sub>, VOC, or SO<sub>2</sub>, 100 tpy CO, 15 tpy PM<sub>10</sub>, 10 tpy PM<sub>2.5</sub>, 0.6 tpy lead), includes a WAC 173-400-091 synthetic minor limit, has a toxic air pollutant emission increase above the acceptable source impact level in WAC 173-460-150, or has significant public interest. A notice of application was posted on the Agency's website for 15 days. No requests or responses were received; however, Agency staff have determined significant public interest merits an opportunity for public notice and comment. A copy of the website posting is below:

### New Construction Projects

Company	Address	Project Description	Date Posted	Contact Engineer
Darling Ingredients Inc	<a href="#">2041 Marc St. Tacoma, WA 98421</a>	Permit application submitted for a new rendering facility which is used for the reduction of animal matter.	10/10/23	<a href="#">Ralph Munoz</a>

The Agency conducted a public comment period from February 29, 2024, to April 19, 2024, including a public hearing by Zoom on April 17, 2024. The public notice was published in the Tacoma News-Tribune, the Daily Journal of Commerce, the Suburban Times, and Tacoma Weekly and on the Agency website on February 29, 2024. Notice was also emailed to the Agency's Permit Actions email list.

The comments received by email, and the entire transcript of the public hearing, are included below, in Section O. The Agency's responses are included with the comments.

Several conditions were clarified as a result of the comments. The changes to the conditions are shown in strikethrough-underline format in Section O.

## L. RECOMMENDED APPROVAL CONDITIONS

### Standard Conditions:

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the installation address in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.
2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.

### Specific Conditions:

3. The owner and/or operator shall not process more than 500 tons of raw material per day. Monthly records shall be kept on site to verify compliance with this requirement.

4. The Rendering building shall be kept under negative pressure at all times when receiving or storing raw material or in the process of rendering raw material, except during limited periods when the receiving area doors are open to allow for entry/exit of raw materials as needed.
  - a. The owner and/or operator shall take monthly readings with a portable anemometer to verify that the main processing building is under negative pressure during periods of normal plant operation. The anemometer shall be calibrated per the manufacturer's recommendations.
    - i. As an alternative to taking monthly readings with a portable anemometer to verify that the main processing building is under negative pressure, the owner and/or operator may choose to design and operate the ventilation system serving the main processing building such that a minimum of not less than 15 air changes per hour is maintained through the building. To demonstrate compliance with the air changes requirements, the owner or operator shall notify the agency of the intent to meet the alternative standard under this paragraph and shall submit:
      1. Calculations to demonstrate that the ventilation system of the building is designed to meet the alternative ventilation system standard; and
      2. A plan for monitoring appropriate parameters (for example, pressure at the fan inlet, or fan revolutions per minute) to demonstrate that the alternative ventilation system standard is continuously achieved.
  - b. The owner and/or operator shall monthly inspect the integrity of the building and the associated vapor collection ductwork for the rendering process. This includes looking for any corrosion of piping or ducting, leaks, and openings to the building. Any instances where the integrity is found to be compromised must be repaired as soon as practicable, and within 15 days of discovery. Until the repair is made, the owner and/or operator shall daily inspect for odors migrating beyond the property line to help prevent excess odors from escaping the building until the repair can be made. Daily inspections shall include walking around the facility property and using sight, sound, and smell to detect any potential odor migration. If odor migration is found during daily inspections, the facility shall take immediate corrective action to minimize impacts, which may include ceasing operations. A logbook shall be kept for documentation of all monthly equipment inspections and all daily odor inspections. For each inspection, the logbook shall include the date and time of the inspection, the name of the person conducting the inspection, and a list of all areas of compromised integrity that will require repair. Once the repair is made, the logbook shall also document the time and date of the repair.
5. All material received for the purposes of rendering shall be processed within 24 hours of receipt. Each delivery of material shall be monitored, and records shall be maintained to ensure that processing is performed within this time limit.
6. Raw material delivery trucks shall not be accepted and/or unloaded without first being weighed/scaled. The delivery trucks containing raw materials must be unloaded into the raw material receiving pit of the process building when the 125,000 cfm air room scrubber is operating.



7. Raw material delivery trucks shall be unloaded within 8 hours of being scaled/weighed. If a delivery truck cannot be unloaded within 8 hours of being scaled, the owner and/or operator shall ensure that odors are not released from the trucks by either temporarily enclosing (Such as tarping) them until they can be unloaded or removed from the facility until they are able to unload the material within the 8-hour window.
8. The raw material trucks shall be cleaned prior to exiting the facility to prevent any odor-causing material from being tracked out of the facility.
9. No outdoor storage of raw materials is allowed. Material delivery trucks waiting their turn to unload does not count as outdoor storage of raw materials as long as it remains inside the truck.
10. The owner and/or operator shall wash/clean the raw materials if it is determined that the raw materials would have dirt or soil on them prior to entering the facility to ensure no residual heavy metals or impurities enter the cooking process. A visual inspection for dust and soil is acceptable for this permit condition.
11. All emissions from the Dupps Supercookor 260U (or equivalent), shall be captured and vented to the air-cooled condenser, followed by the 15,000 cfm venturi scrubber and then the 18 MMbtu/hr Thermal Oxidizer. The presence of a compromise in the integrity of cooking equipment, air pollution control equipment, or associated ducting shall constitute a violation of this condition, unless that compromise has been documented as needing repair in the log required under Condition 4.b. Examples of compromised integrity include, but are not limited to, degraded or corroded piping that contains unintended openings, broken connectors/gaskets/seals, rust that is deeper than superficial, or any other unintentional openings that have the potential to leak air emissions, including odors.
12. All fugitive emissions from the post cooker drains, screens, screw presses, hammermill, protein grinding, crax material storage, centrifuges and discharge conveyors shall be conducted inside the negative pressure building and vented to the 125,000 cfm room air scrubber. The presence of a compromise in the integrity of the building envelope shall constitute a violation of this condition, unless that compromise has been documented as needing repair in the log required under Condition 4.b.
13. The finished protein meal storage silo shall be equipped with bin vent filters meant to capture and abate particulate matter and odor emissions during storage. The finished protein meal loading into trucks, supersacks, or containers should be performed in a covered area to minimize material loss.
14. The owner and/or operator shall ensure any wastewater treatment equipment is located inside the building that is under negative pressure and routed to the air room scrubber. Any outdoor tanks used for wastewater treatment shall be completely closed at all times, except during periods of maintenance, repairs, or other types of malfunctions/issues that would require the source to ensure that the equipment is operating properly.
15. The owner and/or operator shall only use natural gas as supplemental gas in the 18 MMbtu/hr Thermal Oxidizer.

16. In the event that the Thermal Oxidizer malfunctions and cannot process the Rendering operation air emissions, the owner and/or operator shall route the emissions through the air room control system (air-cooled condenser, 15,000 cfm venturi scrubber and the 125,000 cfm room air scrubber)
  - a. The rendering operations (including the cooker) shall not operate through the air room control system during malfunctions for more than 7 days or after the TO is back up and operating properly, whichever occurs first.
  - b. Until the TO is operating properly, the owner and/or operator shall daily inspect for odors migrating beyond the property line to help prevent excess odors from escaping the building until the repair can be made. Daily inspections shall include walking around the facility property and using sight, sound, and smell to detect any potential odor migration. If odor migration is found during daily inspections, the facility shall take immediate correction action to minimize impacts, which may include ceasing operations. A logbook shall be kept for documentation of all daily odor inspections. For each inspection, the logbook shall include the date and time of the inspection and the name of the person conducting the inspection. Once the TO is operating properly, the logbook shall also document the time and date of the repair.
  - c. As soon as the owner and/or operator is aware that repairs cannot be made within 7 days, the owner and/or operator shall cease all raw material processing until the TO is back up and running properly.
17. The 18 MMbtu/hr thermal oxidizer shall be operated with a minimum combustion temperature of no less than 1,400 degrees F and the retention time shall be no less than 1.0 second. The thermal oxidizer temperature shall be continuously monitored and recorded.
18. The owner and/or operator shall limit the emissions from the Dupps Supercooker 260U (or equivalent) to the following:
  - a. 0.0052 lbs of VOC/ton of raw material
  - b. 0.0137 lbs of CO/ton of raw material processed
  - c. 0.0069 lbs of NO<sub>x</sub>/ton of raw material processed
  - d. 0.0335 lbs of SO<sub>x</sub>/ton of raw material processed
  - e. 0.0033 lbs of PM<sub>10</sub>/ton (filterable and condensable) of raw material processed
19. Within 120 days of commencing initial startup of the Dupps Supercooker 260U cooker (or equivalent) and then repeatedly once every 48 to 52 months from the previous test for only VOC, NO<sub>x</sub>, and PM<sub>10</sub>, the owner and/or operator shall conduct a performance test to verify compliance with the emissions standards in Permit Condition 18:
  - a. VOC testing shall be conducted in accordance with EPA Test Method 25 or 25A or an alternative method approved by the Agency. Testing to quantify exempt compounds, such as methane, shall be conducted in accordance with EPA Test Method 18 or an alternative method approved by the Agency.

- b. CO testing shall be conducted in accordance with EPA Test Method 10 or an alternative method approved by the Agency.
- c. NOX testing shall be conducted in accordance with EPA Test Method 7E or an alternative method approved by the Agency.
- d. SOx testing shall be conducted in accordance with EPA Test Method 6C or an alternative method approved by the Agency.
- e. PM10 Testing shall be conducted in accordance with) shall be conducted using EPA Method 201 and 202, EPA Method 201a and 202 or an alternative method approved by the Agency.

The owner and/or operator shall conduct testing in accordance with Section 3.07 of Puget Sound Clean Air Agency (PSCAA) Regulation I using the following test Methods:

Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4.

The owner and/or operator may wait until the unit is needed to commence initial startup. Testing shall be performed while operating at or near maximum capacity of the rendering operation or under at another capacity that is approved by the Agency prior to conducting the performance test. During the performance test, the raw material process rate shall be monitored and recorded in tons per hour.

- 20. At least once per quarter during operation of the Dupps Supercookor 260U cooker (or equivalent) the owner and/or operator shall conduct visual observations of the Thermal Oxidizer exhaust. If any emissions are visible from the exhaust, the owner and/or operator shall conduct a visible emissions observation by a person certified in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A). Such a test shall consist of a minimum of 30 minutes of opacity observations for the cooker. The owner and/or operator shall ensure 0% opacity from the cooker as measured with the Method 9.
- 21. The owner and/or operator shall limit emissions of the 125,000 cfm air room scrubber to the following:
  - a. PM10 - 0.001 gr/dscf outlet grain loading standard
  - b. VOC – 3.2 ppmv outlet standard measured as Methane
  - c. H2S – 0.75 ppmv outlet standard
- 22. Within 120 days of commencing initial startup of the 125,000 cfm air room scrubber and then repeatedly once every 48 to 52 months of the previous test for H2S and VOC, the owner and/or operator shall conduct a performance test to verify compliance with the emission limits in Permit Condition 21:



- a. PM10 Testing (filterable and condensable) shall be conducted in accordance with) shall be conducted using EPA Method 201 and 202, EPA Method 201a and 202 or an alternative method approved by the Agency.
- b. VOC testing shall be conducted in accordance with EPA Test Method 18, 25, 25A or an alternative method approved by the Agency.
- c. H2S testing shall be conducted using EPA Test Method 11, ARB Method 15 or 16A or other approved method by the Agency.

The owner and/or operator shall conduct testing in accordance with Section 3.07 of Puget Sound Clean Air Agency (PSCAA) Regulation I using the following test Methods:

Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4.

The owner and/or operator may wait until the unit is needed to commence initial startup. Testing shall be performed while operating at or near maximum capacity of the rendering operation or under at another capacity that is approved by the Agency prior to conducting the performance test.

23. A testing notification must be submitted to the Agency in accordance with Section 3.07 of Regulation I, 21 days before any compliance test required by this Order of Approval is conducted. The facility must submit a test plan with the notification that includes all process equipment operating data that will be collected during the test as well as the methods that will be used to collect the data. The test plan shall also include an explanation on the proposed testing capacity if the maximum plant operating capacity is not planned on being used during the test.
24. The results of each source test shall be submitted to the Agency within 60 days after completion of the source tests.
25. The owner or operator shall develop and maintain an Operation and Maintenance (O&M) plan for the air-cooled condenser, the 15,000 cfm venturi scrubber, the 125,000 cfm air room scrubber, and the 18 MMBtu/hr Thermal Oxidizer. The O&M plan shall be developed and implemented per Agency's Regulation I. Additionally, the owner or operator shall establish a complaint response program as part of the O&M Plan. The program shall include a complaint phone line, criteria, and methods for establishing whether Darling Ingredients is the source of emissions related to the complaint, and a format for communicating results of investigation and advising complainants of Darling Ingredients' corrective actions.
  - a. The operation and maintenance plan for the Thermal Oxidizer shall include how the temperature measurement device is maintained in good working order.
  - b. The owner or operator shall record and investigate complaints received regarding air quality as soon as possible, but no later than one working day after receipt.

- c. The owner or operator shall correct any problems identified by these complaint investigations within 24 hours of identification or cease operation of the equipment until the problem is resolved;
- d. Records of all complaints received regarding air quality issues shall include information regarding date and time of complaint (if known); name and address of complainant (if known); nature of the complaint(if known); investigation efforts completed and basis for conclusion reached; and date, time, and nature of any corrective action taken.

26. Odor

- a. If the Control Officer or authorized representative of the Agency communicates to the owner or operator that they have detected an odor at level 2 or greater as defined in Agency's Regulation I, Section 9.11(b), beyond the property line that the Agency has documented to be attributable to or partially attributable to emissions from rendering facility, the owner and/or operator must follow the odor response plan developed under part b. of this condition.
- b. The owner and/or operator shall develop an odor response plan and odor complaint log when complying with part a. of this condition, with the following elements:
  - i. Initiate an investigation as soon as possible, but no later than 12 hours after receipt of notice from the Control Officer or authorized representative of the Agency.
  - ii. Take corrective action to eliminate odors beyond the property line as soon as possible, but within 24 hours after receipt of the complaint from the Control Officer or authorized representative of the Agency.
  - iii. Develop a report for every odor complaint and investigation. The odor complaint and investigation report must include the following:
    - 1. The date and time of when the complaint was received.
    - 2. The date and time of when the investigation was initiated.
    - 3. Location of communicated odor and area investigated (including information provided by the Control Officer and any other areas the investigation identifies).
    - 4. Weather conditions during the complaint.
    - 5. Description of complaint and investigation and if an odor was detected.
    - 6. Actions taken in response to the complaint.
    - 7. The date and time odors are no longer detected beyond the property line.

27. All records required by this Order of Approval must be maintained onsite and available for inspection by agency personnel for at least two years from the date of generation.

28. The following records shall be kept onsite and up-to-date, and be made readily available to Agency personnel upon request at all times:

- a. Compliance test reports.

- b. Any certified opacity readings that were required to be conducted with an EPA Method 9.
- c. Amount of raw materials processed per month.
- d. A copy of the odor complaint log and odor response plan.
- e. A written log showing corrective actions taken to maintain compliance with this Order of Approval. Each log entry must include date, time and description of any and all corrective action taken.
- f. A written log showing any instances when the Thermal Oxidizer malfunctioned and raw material gases from the cooker were routed to the 125,000 cfm air room scrubber as a backup.
- g. The Operation and Maintenance (O&M) plan
- h. Records of anemometer measurements and calibrations shall be kept, maintained, and made readily available for District inspection upon request, unless the alternative ventilation system standard is utilized. If the alternative ventilation system standard is utilized, records of the calculations demonstrating that the ventilation system of the building is designed to meet the alternative ventilation system standard.
- i. Records of Natural Gas combusted in the thermal oxidizer per month.

29. The Agency shall be notified, in writing, within 30 days of the end of the month in which an exceedance of any emissions limitation and standard identified in these permit conditions is discovered.

30. This approval does not relieve the applicant or owner of any requirement or regulation of the Agency.

#### **M. CORRESPONDENCE AND SUPPORTING DOCUMENTS**

#### **N. REVIEWS**

Reviews	Name	Date
Engineer:	Ralph Munoz	12/13/23
Inspector:		
Second Review:	John Dawson	12/13/2023
Applicant Name:	Jon Elrod/Carla Jo	1/31/24

#### **O. COMMENTS AND AGENCY RESPONSE**

## Response to Comments

Puget Sound Clean Air Agency (the Agency) would like to thank the government agencies, business and community organizations, and individuals for taking the time to review Proposed Order of Approval No. 12348, attend the April 17, 2024, public hearing, and submit comments to the Agency on the Proposed Order of Approval (OA). The Agency received 24 comments (verbally and orally which are treated the same by the Agency.) This appendix to the worksheet for Order of Approval No. 12348 contains comments on the Proposed Order of Approval and Agency responses to the comments received by the Agency within the comment period.

The Agency reviewed all comments received and has generally responded to all comments below. In addition, based on the Agency's review of all submitted comments, the Agency has made some adjustments to the language of a few conditions.

Some commenters had questions or requested more information about the Notice of Construction (NOC) process.

Under Agency Regulation I, Article 6, and the sections of WAC 173-400 that are adopted by the Agency, new (or modified) sources of air pollution, and substantial alterations of air pollution control equipment, require the submittal of a NOC application by the source and the issuance of an Order of Approval by the Agency. The Agency determines Best Available Control Technology (BACT) for new sources (which includes replacement of existing sources) through the NOC process. BACT is defined in WAC 173-400-030.

The Agency also determines BACT for toxic air pollutants (TAPs), or tBACT, pursuant to Agency Regulation III. The list of TAPs is given in WAC 173-460. For any TAP that is emitted at a rate greater than the Small Quantity Emissions Rate (SQER) as listed in WAC 173-460-150, the Agency requires dispersion modeling to assure that ambient concentrations of TAPs from the project do not exceed any Acceptable Source Impact Level (ASIL), also as listed in WAC 173-460-150. The Agency may also require modeling to demonstrate that emissions from a project will not cause an exceedance of the National Ambient Air Quality Standards (NAAQS) for the six "criteria" pollutants (ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, nitrogen dioxide) for which US EPA has established a NAAQS. As stated above in the worksheet, no NAAQS are exceeded by this proposed action.

Consistent with the above, the Agency has issued a NOC Order of Approval that establishes conditions for the approved emission units, including Condition 1 that states: "Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the installation address in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency". Condition 1 requires Darling Ingredients to install and operate consistent with all plans and specifications on file with the Agency and is a condition commonly used by air authorities in Washington to ensure facilities operate consistently with issued orders of approval.

This response to comments is organized around the topics that arose in the comments. Each commenter was assigned a number (given in the table below). Each Agency response indicates which commenters raised issues related to that theme. The comments are reproduced in their entirety after the responses.

## List of Commenters

1. Communities for a Health Bay	13. Robin Evans-Agnew
2. Tacoma City Council and Mayor	14. Indivisible Tacoma
3. Teamsters Local Union No. 313	15. Courtney Davis
4. Shane Martinson	16. Ann Dorn
5. Jon Elrod	17. Diane Burke
6. Kris Fish	18. JP Kemmick
7. Steven Johnson	19. Scott Nelson
8. Morgan Alexander	20. Carol Hendershot
9. Julia Waters	21. Stacy Oaks
10. Maggie Karshner	22. Janeen Provazek
11. Andrew Picken	23. Aife Pasquale
12. Barbara Church	24. Kit Burns

## Odors

Commenters 1, 2, 7, 8, 9, 10, 11, 12, 14, 15, 16, 19, 20, 21, 22, 23, and 24

Many commenters discussed odor. Concerns raised included the impacts of rendering odors on nearby communities and the past history of odors from this facility. Other concerns related to the effectiveness of air pollution controls and odors stemming from the transport of materials to or from the facility.

Agency response:

The Agency has determined that the pollution controls and practices proposed, subject to the provisions in the Order of Approval, constitute BACT for all pollutants, including odor. The Agency followed the process prescribed in Agency Regulations I and III, including the applicable provisions of WAC 173-400 and 173-460. The order goes beyond the odor regulation in Agency Regulation I, Section 9.11, and regulates odor as a pollutant subject to BACT.

The Agency has determined that the controls, subject to the conditions in the permit, will be highly effective. The Agency has developed an Order of Approval with enforceable conditions, reflecting Best Available Control Technology and compliance with the applicable regulations. The conditions in the Order of Approval serve to mitigate or prevent air quality impacts, including odor. The worksheet cites numerous instances where facilities have used and/or other air agencies have required similar technology types for compliance purposes.

The Agency is aware of the past history of odors attributable to the Darling Ingredients facility. These odors were primarily attributable to leaking or corroded equipment, meaning that not all gases caused by the rendering process were properly collected and routed to air pollution controls. This Order of Approval contains numerous conditions that require Darling Ingredients to perform regular inspections of their equipment and to repair any issues in a timely manner. (See Conditions 4, 11, and 12.) These new requirements get to the root cause of the previous odors.

Commenter number 20 included a reference to a report-out from a 1998 workshop held to discuss confined animal operations, wastewater treatment, and biosolids recycling. While the odors from rendering would likely be different from the odors investigated in this workshop, odors can greatly impact quality of life and enjoyment of property, and odors may be an indicator of emissions of toxic air pollutants. This is why the Agency regulates odor as a pollutant and why the permit has so many conditions related to preventing odorous emissions.

Commenter number 1 mentioned concerns over odors during transport of materials to and from the facility, e.g., on Interstate 5. This is outside the scope of process prescribed in Agency Regulations I and III, including the applicable provisions of WAC 173-400 and 173-460.

These comments did prompt the Agency to reconsider a handful of permit conditions, and several conditions related to odor have been clarified.

- A new **Condition 30** has been added to stress that Agency Regulation I, Section 9.11, regarding odor, applies to the facility, in addition to the specific odor-related conditions of the permit. This condition has been changed as follows:

**30. This approval does not relieve the applicant or owner of any requirement or regulation of the Agency.**

- **Condition 13**, regarding the bin vent filters on the finished protein meal storage silo has been clarified as follows, reflecting the qualitative BACT work practice standard for odorous emissions from this silo:

13. The finished protein meal storage silo shall be equipped with bin vent filters **to reduce** **meant to capture and abate** particulate matter and odor emissions during storage. The finished protein meal loading into trucks, supersacks, or containers should be performed in a covered area to minimize material loss.

- **Condition 16**, regarding the use of room air controls as a backup in case of malfunction of the thermal oxidizer has been clarified as follows:

16. In the event that the Thermal Oxidizer malfunctions and cannot process the Rendering operation air emissions, the owner and/or operator shall route the emissions through the **air-cooled condenser followed by the 15,000 cfm venturi scrubber followed by the 125,000 room air scrubber for no more than 7 days or until the TO is back up and running properly the air room control system (air-cooled condenser, 15,000 cfm venturi scrubber, and the 125,000 cfm room air scrubber).**

a. **The Rendering operations (including the cooker) shall not operate through the air room control system during malfunctions for more than 7 days or after the TO is back up and operating properly, whichever occurs first.**

(Previous condition 16.a becomes 16.b., and previous Condition 16.b. becomes 16.c.)

### Stringency of permit and enforcement

Commenters 1, 2, 19, 21, 22, 24.

These comments focused on the stringency of the permit and on possible future enforcement. Commenters encouraged the Agency to make the permit conditions as stringent as possible. Commenter 13 discussed the required frequency of testing, especially as it relates to climate change-driven sea level rise.

Agency response:

The draft Order of Approval includes the Agency's determination of Best Available Control Technology, which is the only allowable degree of stringency for new equipment under the Notice of Construction program in Agency Regulations I and III, including the applicable provisions of WAC 173-400 and 173-460. The Agency has determined that the controls, subject to the conditions in the permit, will be highly effective and will minimize offsite impacts.

This Order of Approval contains many more provisions than previous permits for this facility. These include recurring emissions testing, regular checks for leaks, an odor complaint phone line, and many others. These will serve to require timely repair of malfunctioning or leaking equipment and to minimize offsite impacts.

Inspections will occur on a regularly scheduled basis with additional review initiated as deemed appropriate by Agency management. Non-compliance will be handled in accordance with the Agency's standard procedures for violations, corrective actions, and civil penalties. Regarding enforcement, the Agency does not specify future actions or outcomes as permit conditions. Any future enforcement action taken will depend on the specific facts, will be evaluated on a case-by-case basis, and will follow the Agency's procedures for enforcement case processing. Violations can lead to mandatory corrective actions and/or civil penalties, in accordance with the Agency's policies.

Regarding the frequency of emissions testing, while the emissions tests will occur every 48-52 months, the permit requires the applicant to comply with many provisions at shorter timescales, such as frequent checks for leaking equipment or openings in the building envelope, quarterly visible emissions checks, and many other conditions related to recordkeeping and odor monitoring. There is no reason to believe that sea level rise would impact the effectiveness of air pollution controls.

These comments did prompt the Agency to reconsider a handful of permit conditions, and several conditions related to emission limits and inspections have been clarified.

- **Condition 11**, related to leaking equipment, has been clarified to give examples of what is meant by the phrase "a compromise in the integrity" of equipment.

11. All emissions from the Dupps Supercookor 260U (or equivalent), shall be captured and vented to the air-cooled condenser, followed by the 15,000 cfm venturi scrubber and then the 18 MMbtu/hr Thermal Oxidizer. The presence of a compromise in the integrity of cooking equipment, air pollution control equipment, or associated ducting shall constitute a violation of this condition, unless that compromise has been documented as needing repair in the log required under Condition 4.b. Examples of compromised integrity include, but are not limited to, degraded or corroded piping that contains unintended openings, broken connectors/gaskets/seals, rust that is deeper than superficial, or any other unintentional openings that have the potential to leak air emissions, including odors.



- **Condition 18**, which includes the numerical emission limits for the cooker, has been split into new Conditions 18 and 19. Previously, Condition 18 included the testing requirements as well as the emissions limits. The limits have been moved to a separate condition from the testing requirements in order to avoid the mistaken impression that the limits apply only during tests. Condition 18 has been modified as follows.

*Previous Condition 18:*

18. Within 120 days of commencing initial startup of the Dupps Supercookor 260U cooker (or equivalent) and then repeatedly once every 48 to 52 months from the previous test for only VOC, NO<sub>x</sub>, and PM<sub>10</sub>, the owner and/or operator shall conduct a performance test to verify compliance with the following emissions standards on the thermal oxidizer:

- a. 0.0052 lbs of VOC/ton of raw material processed - VOC testing shall be conducted in accordance with EPA Test Method 25 or 25A or an alternative method approved by the Agency. Testing to quantify exempt compounds, such as methane, shall be conducted in accordance with EPA Test Method 18 or an alternative method approved by the Agency.
- b. 0.0137 lbs of CO/ton of raw material processed- CO testing shall be conducted in accordance with EPA Test Method 10 or an alternative method approved by the Agency.
- c. 0.0069 lbs of NO<sub>x</sub>/ton of raw material processed - NO<sub>x</sub> testing shall be conducted in accordance with EPA Test Method 7E or an alternative method approved by the Agency.
- d. 0.0335 lbs of SO<sub>x</sub>/ton of raw material processed - SO<sub>x</sub> testing shall be conducted in accordance with EPA Test Method 6C or an alternative method approved by the Agency.
- e. 0.0033 lbs of PM<sub>10</sub>/ton (filterable and condensable) of raw material processed – PM<sub>10</sub> Testing shall be conducted in accordance with) shall be conducted using EPA Method 201 and 202, EPA Method 201a and 202 or an alternative method approved by the Agency.

The owner and/or operator shall conduct testing in accordance with Section 3.07 of Puget Sound Clean Air Agency (PSCAA) Regulation I using the following test Methods:

Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4.

The owner and/or operator may wait until the unit is needed to commence initial startup. Testing shall be performed while operating at or near maximum capacity of the rendering operation or under at another capacity that is approved by the Agency prior to conducting the performance test. During the performance test, the raw material process rate shall be monitored and recorded in tons per hour.



*New Conditions 18 and 19:*

18. The owner and/or operator shall limit the emissions from the Dupps Supercooker 260U (or equivalent) to the following:
- 0.0052 lbs of VOC/ton of raw material
  - 0.0137 lbs of CO/ton of raw material processed
  - 0.0069 lbs of NO<sub>x</sub>/ton of raw material processed
  - 0.0335 lbs of SO<sub>x</sub>/ton of raw material processed
  - 0.0033 lbs of PM<sub>10</sub>/ton (filterable and condensable) of raw material processed
19. Within 120 days of commencing initial startup of the Dupps Supercooker 260U cooker (or equivalent) and then repeatedly once every 48 to 52 months from the previous test for only VOC, NO<sub>x</sub>, and PM<sub>10</sub>, the owner and/or operator shall conduct a performance test to verify compliance with the emissions standards in Permit Condition 18:
- VOC testing shall be conducted in accordance with EPA Test Method 25 or 25A or an alternative method approved by the Agency. Testing to quantify exempt compounds, such as methane, shall be conducted in accordance with EPA Test Method 18 or an alternative method approved by the Agency.
  - CO testing shall be conducted in accordance with EPA Test Method 10 or an alternative method approved by the Agency.
  - NO<sub>x</sub> testing shall be conducted in accordance with EPA Test Method 7E or an alternative method approved by the Agency.
  - SO<sub>x</sub> testing shall be conducted in accordance with EPA Test Method 6C or an alternative method approved by the Agency.
  - PM<sub>10</sub> Testing shall be conducted in accordance with) shall be conducted using EPA Method 201 and 202, EPA Method 201a and 202 or an alternative method approved by the Agency.

The owner and/or operator shall conduct testing in accordance with Section 3.07 of Puget Sound Clean Air Agency (PSCAA) Regulation I using the following test Methods:

Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4.

The owner and/or operator may wait until the unit is needed to commence initial startup. Testing shall be performed while operating at or near maximum capacity of the rendering operation or under at another capacity that is approved by the Agency prior to conducting the performance test. During the performance test, the raw material process rate shall be monitored and recorded in tons per hour.

- **Condition 20**, which includes the numerical emission limits for the room air scrubber, has been split into new Conditions 21 and 22. Previously, Condition 20 included the testing requirements as well as the emissions limits. The limits have been moved to a separate condition from the

testing requirements in order to avoid the mistaken impression that the limits apply only during tests. Condition 20 has been modified as follows.

*Previous Condition 20:*

20. Within 120 days of commencing initial startup of the 125,000 cfm air room scrubber and then repeatedly once every 48 to 52 months of the previous test for H<sub>2</sub>S and VOC, the owner and/or operator shall conduct a performance test to verify compliance with the following emissions standards
- a. PM<sub>10</sub> - 0.001 gr/dscf outlet grain loading standard - PM<sub>10</sub> Testing (filterable and condensable) shall be conducted in accordance with) shall be conducted using EPA Method 201 and 202, EPA Method 201a and 202 or an alternative method approved by the Agency.
  - b. VOC – 3.2 ppmv outlet standard measured as Methane - VOC testing shall be conducted in accordance with EPA Test Method 18, 25, 25A or an alternative method approved by the Agency.
  - c. H<sub>2</sub>S – 0.75 ppmv outlet standard– H<sub>2</sub>S testing shall be conducted using EPA Test Method 11, ARB Method 15 or 16A or other approved method by the Agency.

The owner and/or operator shall conduct testing in accordance with Section 3.07 of Puget Sound Clean Air Agency (PSCAA) Regulation I using the following test Methods:

Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4.

The owner and/or operator may wait until the unit is needed to commence initial startup. Testing shall be performed while operating at or near maximum capacity of the rendering operation or under at another capacity that is approved by the Agency prior to conducting the performance test.

*New Conditions 21 and 22:*

21. The owner and/or operator shall limit emissions of the 125,000 cfm air room scrubber to the following:
- a. PM<sub>10</sub> - 0.001 gr/dscf outlet grain loading standard
  - b. VOC – 3.2 ppmv outlet standard measured as Methane
  - c. H<sub>2</sub>S – 0.75 ppmv outlet standard
22. Within 120 days of commencing initial startup of the 125,000 cfm air room scrubber and then repeatedly once every 48 to 52 months of the previous test for H<sub>2</sub>S and VOC, the owner and/or operator shall conduct a performance test to verify compliance with the emission limits in Permit Condition 21:

- a. PM10 Testing (filterable and condensable) shall be conducted in accordance with) shall be conducted using EPA Method 201 and 202, EPA Method 201a and 202 or an alternative method approved by the Agency.
- b. VOC testing shall be conducted in accordance with EPA Test Method 18, 25, 25A or an alternative method approved by the Agency.
- c. H2S testing shall be conducted using EPA Test Method 11, ARB Method 15 or 16A or other approved method by the Agency.

The owner and/or operator shall conduct testing in accordance with Section 3.07 of Puget Sound Clean Air Agency (PSCAA) Regulation I using the following test Methods:

Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4.

The owner and/or operator may wait until the unit is needed to commence initial startup. Testing shall be performed while operating at or near maximum capacity of the rendering operation or under at another capacity that is approved by the Agency prior to conducting the performance test.

- **Condition 17** has been reorganized. The provision of Condition 17 related to the plan for operation and maintenance of the thermal oxidizer has been moved to Condition 25 (previously Condition 23), related to the facility's required Operation and Maintenance Plan.

**17.** The 18 MMBtu/hr thermal oxidizer shall be operated with a minimum combustion temperature of no less than 1,400 degrees F and the retention time shall be no less than 1.0 second. The thermal oxidizer temperature shall be continuously monitored and recorded. At a minimum, the operation and maintenance plan for the Thermal Oxidizer shall also include how the temperature measurement device is maintained in good working order.

~~23.~~ **25.** The owner or operator shall develop and maintain an Operation and Maintenance (O&M) plan for the air-cooled condenser, the 15,000 cfm venturi scrubber, the 125,000 cfm air room scrubber, and the 18 MMBtu/hr Thermal Oxidizer. The O&M plan shall be developed and implemented per Agency's Regulation I. Additionally, the owner or operator shall establish a complaint response program as part of the O&M Plan. The program shall include a complaint phone line, criteria, and methods for establishing whether Darling Ingredients is the source of emissions related to the complaint, and a format for communicating results of investigation and advising complainants of Darling Ingredients' corrective actions.

a) The operation and maintenance plan for the Thermal Oxidizer shall include how the temperature measurement device is maintained in good working order.

(Previous conditions 23.a., 23.b., and 23.c., become conditions 25.b., 25.c, and 25.d., respectively.)

## **Environmental Justice and location; HEAL Act**

Commenters 1, 2, 9, 19, 21, 23.

These comments focused on environmental justice considerations. Commenters encouraged the Agency to make the permit conditions as stringent as possible. Commenter 21 specifically mentioned the state's Healthy Environment for All (HEAL) Act.

### **Agency response:**

The Agency followed the process prescribed in Agency Regulations I, II, and III, including the applicable provisions of WAC 173-400 and 173-460. These include the determination that the proposal will employ Best Available Control Technology and will meet all applicable limitations on emissions and ambient concentrations of toxic air pollutants, subject to the provisions in the Order of Approval. The concept of environmental justice is an important part of the idea that all new or modified sources are subject to BACT-level pollution controls and stringent requirements for emissions of toxic air pollutants, which are reflected in the conditions of the Order of Approval. To characterize the Agency's determination of Best Available Control Technology and the imposition of thorough, enforceable permit conditions as "rubber stamping" a business-as-usual idea, as suggested by one commenter, is clearly erroneous. Permit conditions include recurring emissions testing, regular checks for leaks, an odor complaint phone line, and many others. These will serve to require timely repair of malfunctioning or leaking equipment and to minimize offsite impacts.

While the Agency pursues policies and programs to reduce environmental injustices, the Agency does not have the authority to delay or deny a NOC application or to amend the Washington Clean Air Act to add a regulatory requirement, or a basis for denial, as some comments appear to request.

It is worth noting that the HEAL Act applies only to state agencies, and explicitly excludes local governments, such as the Puget Sound Clean Air Agency, from opting in to coverage under the Act (RCW 70A.02.030(1)).

These comments did not result in any changes to the Order of Approval.

## **Complaint line and billboards**

Commenter 1

These comments focused on the complaint line that will be required as part of the Order of Approval. Concerns raised included odors from offsite trucks en route to or from the facility, the placement of billboards, and the possibility of requiring a third party to operate the line.

### **Agency response:**

While the intent of the phone line is to report issues at the facility, and while the Agency's purview would not cover spills on the road or proper transportation methods, there would be nothing preventing people from using the phone line for that purpose.

Regarding the question of whether a third party could manage the complaint phone line, the Agency regulates the activities of the permittee, not third parties. The Agency cannot force Darling to utilize a third-party for this purpose. Similarly, the Agency cannot regulate the presence or absence of billboards on I-5.

The complaint phone line is a direct way for community members to voice their concerns to Darling. Members of the public can also submit odor complaints directly to the Agency, which will respond appropriately.

These comments did not result in any changes to the Order of Approval.

### **General support for project**

Commenters 3, 4, 5, and 6

These commenters expressed support for the project and the Order of Approval. They did not raise any specific concerns.

These comments did not result in any changes to the Order of Approval.

### **Lease agreement, and general opposition to the presence of a rendering plant**

Commenters 7, 8, 9, 10, 11, and 12

These commenters expressed general opposition to the re-start of the facility and the issuance of a permit. Several commenters expressed opposition to the renewal of the facility's lease.

Agency response:

While these commenters expressed opposition to the issuance of a permit, there were no specific concerns raised related to the content of the permit. The Agency followed the process prescribed in Agency Regulations I and III, including the applicable provisions of WAC 173-400 and 173-460. These include the determination that the proposal will employ Best Available Control Technology and will meet all applicable limitations on emissions and ambient concentrations of toxic air pollutants. Regarding the idea, raised by one commenter, that the Agency "supports" this project, the concept of whether or not an agency "supports" a project is not part of the legally prescribed permitting process in Washington's Clean Air Act, WAC 173-400, WAC 173-460, or Agency Regulations I, II, and III. The proposal, subject to the requirements in the permit, meets the applicable regulations. This is the basis on which the Agency is obligated to make its determination.

The status of the facility's lease is determined by the Port of Tacoma, not the Puget Sound Clean Air Agency.

These comments did not result in any changes to the Order of Approval.

### **Premature decision, pending City of Tacoma's Subarea Planning process**

Commenter 13 claims that this determination is premature, pending the City of Tacoma's Subarea Planning process.

Agency response:

Neither the professional staff of the City of Tacoma (page 5 of this worksheet), nor the City's elected officials (Comment #2, above) raised any concerns regarding the subarea plan mentioned in this comment. The commenter's concerns regarding flooding and subarea planning do not appear to have a nexus to this air quality-related permit. Additionally, Condition 2 of the Order of Approval states, "This approval does not relieve the applicant or owner of any requirement of any other governmental agency." This permit does not overrule local zoning.

This comment did not result in any changes to the Order of Approval.

**Other assorted comments**

Commenters 13, 14, 15, 16, 17, 21 and 23

One commenter raised a concern over the cumulative impacts of particulate matter emissions from elsewhere in the meat supply chain. A handful of commenters raised concerns over runoff and water pollution, and some commenters mentioned labor issues and worker safety.

Agency response:

The Agency followed the process prescribed in Agency Regulations I, II, and III, including the applicable provisions of WAC 173-400 and 173-460. These include the determination that the proposal will employ Best Available Control Technology and will meet all applicable limitations on emissions and ambient concentrations of toxic air pollutants. The issues raised here are outside the scope of the legally prescribed permitting process in Washington's Clean Air Act, WAC 173-400, WAC 173-460, or Agency Regulations I, II, and III.

These comments did not result in any changes to the Order of Approval.

## Comments Submitted to Agency

### 1. Communities for a Healthy Bay (CHB)



535 Dock Street  
Suite 213  
Tacoma, WA 98402  
Phone (253) 383-2429  
chb@healthybay.org  
www.healthybay.org

April 19, 2024

Ralph Munoz, Engineer  
Puget Sound Clean Air Agency  
1904 Third Avenue - Suite 105  
Seattle, WA 98101  
Via email to [PublicComment@pscleanair.gov](mailto:PublicComment@pscleanair.gov)

Re: Darling Ingredients – Proposed Order of Approval

Executive Director

Dear Ralph Munoz and Agency staff,

Melissa Malott

Thank you for providing the opportunity to review and comment on the [proposed Order of Approval](#) (Order) for the Darling Ingredients Inc. animal rendering facility (Facility) in Tacoma, WA.

Board of Directors

Johannes Ariens

For over 30 years, Communities for a Healthy Bay (CHB) has been working to engage people in the protection of Commencement Bay, the waters of the South Sound, and the diversity of life they sustain. We are a 501(c)3 nonprofit working with residents, businesses, and government to offer practical, solutions-based environmental leadership in the Puget Sound area. We strive to mobilize popular support for decisions that make our communities healthier and more vibrant.

Brion Baker

Dana Coggon

Craig Devison

Barry Goldstein

Anders Ibsen

Alicia Klein

Alicia Lawver

Joy Stanford

Sheri Tonn

Alan Varsik

First, we want to acknowledge the efforts made by the Agency to update the permit conditions for this Facility. As we understand, Darling's previous permit was quite permissive and likely long overdue for these critical updates. Several provisions seem inspired by the South Coast Air Quality Management District's (AQMD) [Rule 415](#) regarding fugitive emissions and odors from rendering facilities. These new requirements would represent a significant improvement to the operations allowed on the site, though that would largely depend on enforcement.

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501(c)(3) Washington

nonprofit corporation

We also understand the complex role that rendering facilities play in our resource and waste management systems. Without the infrastructure to process the byproducts of meat production, the vast majority of this organic material would need to be landfilled. The breakdown of organic material within landfills produces significant [methane and carbon dioxide emissions](#), with the EPA already identifying [worrying methane exceedances at numerous landfill sites within King and Pierce County](#).

However, we remain skeptical of the enforcement mechanisms available to ensure that Darling operates in accordance with this updated permit. In a letter writing campaign CHB conducted to reach Port of Tacoma Commissioners about this proposal, the vast majority of over 300 letters sent expressed concern and opposition to reopening the Facility. Residents who were unable to enjoy their yards or take a walk in their neighborhood due to putrid odors seem unconvinced that anything will change if Darling reopens.



### Compliance and Environmental Justice

Many agencies classify intense odors as “nuisance emissions” that are regulated differently from [criteria pollutants](#) impacting human health and the environment. [Section 9.11](#) of the Agency’s Emission Standards explains that enforcement action may be taken only when: (i) an Agency Control Officer detects a distinct and definite odor at level 2 or greater, (ii) a signed affidavit from the individual making the complaint, and (iii) the source of the odor can be documented.

CHB is concerned about the processes involved in filing an official odor complaint with the Agency, the availability of odor complaint information to the public, and the overall efficacy of these systems to address odor impacts. We have heard about routine difficulties in tracking down and documenting the source of an odor event while it is occurring, and spoken to residents concerned by the subjective nature of the odor level classifications and having appropriate language access to Control Officers. Taken together, our impression is that official odor complaints will significantly underreport the total impacts that these events have on affected communities. Specifically, people held at the Northwest Detention Center (NWDC) would be affected by much smaller odor events that do not extend beyond the Port of Tacoma. We urge the Agency to consider additional methods of outreach and data collection to provide a more comprehensive view of this Facility’s impacts.

In a [2022 Santa Clara University regulatory review of Darling’s facility in Fresno, CA](#), researchers found that while Darling remained largely in compliance, community members had eventually given up on filing complaints because violations of public nuisance rules did not result in clear action by regulators. Instead, permit violations were addressed swiftly with fines or other enforcement actions. Among the review’s recommendations, it suggests independent community monitoring of emissions that would allow residents to gauge the efficacy of emission mitigation measures. Considering the explicit requirement to maintain and respond to a community complaint phone line, CHB expects that violations of these permit conditions would warrant similarly swift enforcement.

No community understands the effects of poorly managed rendering facilities better than the residents of Vernon, a small town just five miles south of Los Angeles, CA. A [2023 article by Julia Barajas](#) chronicles the struggle of a community absolutely inundated by the odors and emissions of four rendering facilities, in addition to numerous other meat processors. The intensity of these odor events were substantial enough to cause eye and throat irritation, leading some children to be brought home early from school. In a different case, The Concerned Citizens of West Fresno (CCWF) [organized against the Darling Ingredients facility](#) that had been operating in a predominantly Black community since 1953. The founder of CCWF, Dr. Venise Curry, has been working for years tracking the health impacts of emissions on low-income and minority communities. After a lengthy opposition campaign, the [Fresno City Council voted unanimously to relocate the plant by the end of 2023](#).

There is no denying the role that rendering facilities play in keeping waste products out of our landfills. There is also no denying the history of environmental racism and public policy that prioritized the construction of heavy industry in overburdened communities. Many residents still believe that Tacoma has a reputation for approving projects that will exacerbate the significant [health and environmental inequalities](#) present throughout the city.

CHB remains committed to supporting equitable outcomes and access to the policy process. We hope that these comments contribute to a robust review of this draft permit. In addition to these general comments, we offer the following comments on specific conditions in the Agency’s Order.



### Considerations on the Order of Approval

Overall, we were impressed by the conditions included in this Order and think they represent a substantial improvement for the site. We offer some of our thoughts on various provisions below:

- Condition 4: Facility inspection procedures
  - Many of the specifics here appear modeled after AQMD's Rule 15.
    - What was the process for reviewing this rule and discerning which aspects were most appropriate for this proposal?
    - Are there any improvements to this rule being sought by AQMD that your Agency is interested in adopting?
    - Will the Agency have access to/review the logbook mentioned in this condition?
- Conditions 5-10: Improvements to unloading, processing, and sanitation
  - If adopted, these requirements would likely prevent many of the conditions that could cause significant odor events. CHB supports these changes.
  - While cleaning and sanitation of trucks leaving the Facility is important, some community members have experienced odors and spills from trucks transporting material along I-5.
    - Is it possible to include any guidance on proper transportation methods?
    - If material that Darling is transporting is spilled, will the public phone line be available to report any of those complaints?
- Condition 18: Emissions testing guidance
  - CHB supports regular emissions testing given the cumulative impacts of industry on nearby communities.
    - What are the enforcement mechanisms for violations of these emissions standards?
    - Given that methane will be used as the primary fuel source for the cooking operations at the Facility, will there be any specific processes for testing equipment for methane leaks?
- Conditions 23-24: Establishment of a complaint response program
  - As an organization focused on community engagement, we are especially pleased about this condition being included in the proposed Order.
    - Although the idea of a third-party operator managing this complaint system makes sense, CHB is interested in the possibility of this response system being staffed by Port of Tacoma personnel. We believe this would make the system more directly accountable to local residents, provide additional metrics for the Port to evaluate Darling's tenancy, and potentially serve as a pilot that can be expanded to support economic development programs.
  - Darling previously relied on billboards to educate the public on the availability of their complaint phone lines.
    - Given this Facility's location, we think that on-site billboards would be ineffective outreach tools. We also oppose the idea of billboards along I-5 as they could contribute to a negative image of Tacoma.
    - We urge Darling and the Agency to be creative and proactive in this area.

Thank you again for the opportunity to provide feedback on this proposed Order of Approval. Please contact me if there are any questions regarding our comments.

Sincerely,



Melissa Malott, Executive Director  
[mmalott@healthybay.org](mailto:mmalott@healthybay.org) | 253-383-2429 x6

2. Tacoma City Council and Mayor



## City of Tacoma

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City Council

Ralph Munoz, Engineer  
Puget Sound Clean Air Agency  
1904 Third Avenue, Suite 105  
Seattle, Washington 98101

Re: Puget Sound Clean Air Agency Proposed Order No. 12348 for Darling Ingredients Inc.

Dear Ralph Munoz,

This letter is to submit public comment on the Puget Sound Clean Air Agency's preliminary determination that proposed Order No. 12348 should be approved, subject to the conditions in the proposed Order.

This permit for Darling Ingredients Inc. is to replace rendering equipment that was previously destroyed in a fire. The Tacoma City Council has long heard from community about air quality concerns related to the rendering plant, making its future operation practices of great interest to our constituents. Discussions with eastside and northeast community members about the former plant will quickly bring up memories of air pollution and pungent smells that lowered the quality of life for nearby residents. These air quality issues have historically been especially concerning to McKinley Hill residents, who live in low and very low equity areas of our City just south of Tacoma's tideflats.

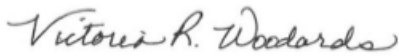
While we understand the economic and environmental benefits of an accessible rendering plant near our commercial businesses, the City of Tacoma imbeds equity in all policies and seeks to ensure minimal negative side effects from future development in our city. This is of special importance when those impacts could exacerbate historic inequities. Whatever is approved at this point in time will impact generations of Tacomans, their health, and their quality of life. To that end, we urge you to utilize your regulatory authority to require the maximum mitigations allowable under state law when approving the redevelopment of this rendering plant. This is especially important to address the need to reduce smells and pollution and other practices impacting air quality.

It was heartening to see the Agency's proposed Order of Approval contains numerous new conditions that aim to ensure compliance with the applicable regulations. The proposed Order includes a requirement for the facility to establish a complaint response program, including a public complaint phone line. We encourage any

conditions you can place that can strengthen the requirements to be responsive to community concerns when they are reported. The proposed Order also requires periodic inspections for compromises in the integrity of the cooking system and its associated ductwork or in the building envelope, and unrepaired compromises may constitute violations. Additionally, the proposed Order requires periodic testing for emissions of volatile organic compounds, carbon monoxide, nitrogen oxides, particulate matter, sulfur oxides, and hydrogen sulfide. These conditions recognize the need to ensure the rebuilt plant is a better neighbor to Tacoma residents in perpetuity. We ask that you fully retain and consider further enhancing these mitigations.

We appreciate the Puget Sound Clean Air Agency's ongoing work to protect public health, improve neighborhood air quality, and reduce our region's contribution to climate change. Thank you for this opportunity to provide public comment.

Sincerely,



Mayor Victoria Woodards



Deputy Mayor John Hines – Position 1



Council Member Sarah Rumbaugh – Position 2



Council Member Jamika Scott – Position 3



Council Member Catherine Ushka – Position 4



Council Member Joe Bushnell – Position 5



Council Member Olgy Diaz – Position 7



Council Member Kristina Walker – Position 8

3. Teamsters Local Union No. 313



## General Teamsters Local Union No. 313

Tacoma and Pierce County, WA Affiliated with the International Brotherhood of Teamsters

220 South 27th Street, Tacoma, Washington 98402  
(253) 627-0103 Tacoma

e-mail: Teamsters313@Teamsters313.org  
(253) 627-0106 Fax

Nick Lansdale, Secretary-Treasurer

Terra Ament, President

Puget Sound Clean Air Agency  
1904 Third Avenue, Suite 105  
Seattle, WA 98101

Puget Sound Clean Air Agency,

This letter is to express support for the Darling Ingredients rendering plant project currently under consideration by the Port of Tacoma. We believe this business benefits the community by providing a necessary and beneficial service that reduces organic material sent to the landfill and reduces carbon impacts on the environment.

Darling is also important to our Union. The loss of the Darling plant will impact our Union by losing about 35 valuable members of our organization. This impact to Teamsters Local Union 313 will also impact on our approximate 1900 members of Teamsters Local Union 313.

While we are aware some are expressing opposition to the project, we think it is important that you hear from people who depend on Darling Ingredients and have firsthand knowledge of the benefit they have on our Union and our community. Please provide the approvals necessary to get this operation back in service as soon as possible.

Sincerely,



Nick Lansdale  
Secretary-Treasurer  
Teamsters Local Union 313

4. Shane Martinson

**From:** [Shane Martinson](#)  
**To:** [Public Comment](#)  
**Subject:** Darling ingredients plant  
**Date:** Wednesday, April 17, 2024 7:01:08 PM

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Hello, I'd like to say as an employee of Darling I'd vote for the permit to continue rebuilding. Without it all of our union brothers and sisters would be put into extreme hardships. We strive to provide a safe work environment but unfortunately accidents can occur in any industrial occupation. The placement of our plant provides a very crucial needed service for many major businesses. Without us here those businesses would suffer. Every detail of this rebuild has been carefully handled and the new structure will be state of the art as far as mitigating any kind of environmental issues. The employees of Darling look forward to having a continued relationship with the city of Tacoma and the Port as well. Thank you for your time.

From Me, Shane J. Martinson

5. Jon Elrod

See hearing transcript, below.

6. Kris Fish

See hearing transcript, below.

7. Steven Johnson

**From:** [Steven Johnson](#)  
**To:** [Public Comment](#)  
**Subject:** Darling Ingredients and the Aroma of Tacoma  
**Date:** Thursday, April 18, 2024 10:57:10 PM

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With the closure of the pulp mill, the progress of Tacoma's air quality has improved. The last thing needed is the smell of rancid meat added to the air. No matter the precautions, it will leak out. Do not let this plant re-open.

8. Morgan Alexander

**From:** [Morgan](#)  
**To:** [Public Comment](#)  
**Subject:** darling Ingredients permit  
**Date:** Thursday, April 18, 2024 5:01:42 PM

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If there is one company that should never have been issued an operating permit, it is Darling Ingredients.

Based on the hundreds (thousands?) of complaints filed with the Puget Sound Clean Air agency - including many neighboring industrial businesses, let alone residents and business owners (myself included) in nearby neighborhoods - they have a 50 year track record of operating with complete disregard to the City of Tacoma. I had to close my business for the better part of a week because the fumes were vomit inducing! They have the distinct honor of being one of a handful of industries that have had a long term negative on the health of the city and its residents with their noxious fumes. Enough is enough! It is time to put an end to their damaging impacts.

If public input does not have sway on denying their permit, then the system is broken and needs to be fixed. Please do the right thing. Thank you.

Best,  
Morgan Alexander  
Tacoma resident and business owner

## 9. Julia Waters

**From:** [fruitheart](#)  
**To:** [Public Comment](#)  
**Subject:** Opposition to the reopening of Darling Ingredients  
**Date:** Wednesday, April 17, 2024 12:50:00 PM

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My name is Julia Waters. I live on the Eastside of Tacoma upwind from the Darling Ingredients animal rendering plant. Communities on the Eastside and Southside of Tacoma are disproportionately impacted by poor air quality and environmental pollution. As an RN currently studying population and community health locally at UW Tacoma, we have learned that the likelihood that you will experience significant health disparities such as increased rates of asthma and a shorter life span are determined more by your zip code than any individual behavioral choices. It's time for the City of Tacoma and the Port to take action to address environmental racism in our communities.

Prior to the fire that closed Darling Ingredients, the air quality on the Eastside was so bad that I could not enjoy time outdoors in my own neighborhood. The stench that wafted up into our community was noxious, and although countless odor nuisance complaints were filed by myself and other residents, no appreciable improvements were made.

Since Darling Ingredients closed, the difference in our quality of life has been dramatic. Neighbors are out walking more, spending time gardening in their yards and enjoying BBQ's with their families. I no longer had to keep all of the windows shut, which resulted in dangerous levels of CO2 building up and creating poor indoor air quality as well.

The Eastside also has some of the lowest percentage of tree cover in Tacoma and is upwind of all of the port pollution. It's not appropriate or equitable for our community to continue to bear the cost of all of the industrial pollution created downwind. Darling Ingredients needs to move its polluting operations to an area with more trees and lower population density. Do not continue to force low income residents of Tacoma to pay for their profits with our health.

Thank you,  
Julia Waters, RN



## 10. Maggie Karshner

**From:** [Maggie Karshner](#)  
**To:** [Public Comment](#)  
**Subject:** Darling Rendering Plant Permit Public Hearing & Comment Period  
**Date:** Wednesday, April 17, 2024 11:26:35 AM

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Hello,

I am a resident and business owner within 3 miles of the Darling Rendering Plant. Depending on which way the wind is blowing, my residence is either an idyllic century-old craftsman or a stinky old hole. I think the worst is when the wind isn't blowing and the stench settles and solidifies. Walking outdoors is like being hit in the nose by noxious pudding. Tacoma is such a beautiful and wonderful city, why do we have to have a rendering facility so close to such a densely populated area?

Darling has proven not to be a good neighbor. The odor and environmental impact of their rendering plant has not been sufficiently mitigated by Darling. We should not allow Darling to replace their rendering equipment that was previously destroyed by fire. They can find a different location, further from human noses, to do their rendering.

~Maggie

Maggie Karshner  
423 E Wright Ave, Tacoma, WA 98404

--

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<http://www.shareyourlife.org>

## 11. Andrew Picken

**From:** [Andrew Picken](#)  
**To:** [Public Comment](#)  
**Subject:** Rendering plant lease denial  
**Date:** Tuesday, April 16, 2024 7:58:40 PM

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Just wanted to write to declare my feelings regarding the Darling rendering plant. As a resident and homeowner in Tacoma I would like the rendering plant to never again be allowed to resume their activities. Tacoma needs to continue to cultivate it's positive reputation and eliminating noxious chemical smells would go a long way in enticing further investment and growth to the water front and the greater city beyond.

I say no to Darling  
Thank you  
Andrew Picken

## 12. Barbara Church

See hearing transcript, below. This comment raised concerns about odors.

13. Robin Evans-Agnew

**From:** [Robin Evans-Agnew](#)  
**To:** [Public Comment](#)  
**Subject:** Public Comments on Proposed Order of Approval for Darling Ingredients  
**Date:** Thursday, April 18, 2024 7:40:04 AM

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Date: 4-18-24

To: Ralph Munoz, Engineer, at Puget Sound Clean Air Agency, 1904 Third Avenue, Suite 105, Seattle, Washington 98101

From: Robin Evans-Agnew

Re: Public Comments on Proposed Order of Approval for Darling Ingredients

Dear Mr Munoz,

I am a resident of Tacoma and a Planetary Health researcher. I am writing in opposition to the proposed order of approval for Darling Ingredients application to install new rendering equipment for the following reasons:

1. Particulate matter emissions from industrial actions constitute the most significant threat to Planetary Health. The cumulative impact of particulate after emissions relating to the entire supply chain of the meat processing industry in the region are not accounted for in this order of approval.
2. The notice of approval is premature pursuant to the existing Subarea Planning process currently under public comment for the Tideflat area. This planning process includes significant changes in land use in close proximity to the Darling plant, specifically the expansion of public access to the Gog Le Hi Te wetlands. Public engagement in the Tideflat area is essential for assuring the interconnection between humans and Nature, providing long term care for Planetary Health, and repairing over a century of environmental-and-human harm to Pierce County.
3. The required periods of inspection of 48-52 months for both the Supercooker and the Air Room Scrubber are insufficient for the expected environmental conditions on the Tideflats in the context of climate change. On March 14, 2024 the Tideflats Subarea Planning Committee reviewed sea-level rise projections that, if combined with a heavy rain event and a rapid glacier collapse on Mt Rainier, would compromise the operations of the Plant. As wildfire smoke events increase in the Tideflat area, there is insufficient knowledge as-yet as to how such ambient air pollution would compromise the efficiency of the cooker and the scrubber.

Thank you.

Robin Evans-Agnew, PhD, RN

## 14. Indivisible Tacoma

From: [Ellen Floyd](#)  
To: [Public Comment](#)  
Subject: Comment Darling Industries Tacoma  
Date: Wednesday, April 17, 2024 10:03:05 PM

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**Letter from Indivisible to PSCAA:** Anyone who has lived in or near Tacoma for any amount of time knows that *the Tacoma aroma has the opposite effect on increasing the status of our city, the economic growth of our businesses, the ambiance and health of our air and waters, and the overall well-being of our businesses and residents.*

The key questions facing PSCCA are:

- Why would you allow one business to have such a deleterious impact on the future reputation and economic prosperity of Tacoma?
- Why would PSCCA want to support a permit that continues into the future the malodorous and polluting industry that has haunted our city for decades?

Clear reasons why Tacoma should not have a rendering plant at our Port are:

1. **A Large Radius of People, Organizations, and Businesses are Affected:** Downtown Tacoma, Eastside Tacoma, Northeast Tacoma, Hilltop, Stadium District, and Fife are all within three miles of the rendering plant (the radius of people who brought a previous lawsuit against Darling). The businesses, workplaces, schools, hospitals, tourist destinations (museums, restaurants, etc.) and homes in these places all experience the plant's revolting smell, harmful health effects, and deleterious economic impacts on a regular to semi-regular basis depending upon which way the wind is blowing.
2. **It is Impossible to "Scrub" the Odors Even with the Best Equipment:** Even a company that specializes in making equipment to prevent rendering smells (Aulick) admits that odor control (and the accompanying serious safety hazards of toxicity) emanating from the processing of animal carcasses in various stages of putrefaction, is a challenging problem. There simply are no scrubbers available that can eliminate the stench. Darling has faced a long list of disputes and lawsuits with no satisfactory resolutions: settlements are small and do not alleviate the problems. <https://aulickchemical.com/case-studies/air-discharge-odor-control-at-a-rendering-facility/>
3. **Darling Industries Has a History of Violations and Avoidance of Accountability:** Darling Industries has a history of violating regulations and avoiding accountability. They emit volatile organic compounds (VOCs), and hazardous animal meal in the form of dust. The violations are very difficult to prove and enforce, and the consequences and fines so miniscule there is no incentive for compliance or even response. <https://casetext.com/case/sines-v-darling-ingredients-inc-1>
4. **Darling Industries Have a History of Water Contamination with Meat/Poultry Products, Fecal Bacteria, and other Industrial Wastes:** Darling plants in other states have a long documentable history of contaminating rivers and salt water bays causing algae blooms, and devastation of fish, water life, and nearby vegetation. <https://www.meatpoultry.com/articles/27246-darling-ingredients-subsidiary-to-pay-540-000-for-environmental-violations>
5. **Darling Industries Have a Long History of Maltreatment and Exploitation of Workers:** Darling Rendering Industries are known for low pay, job insecurity, poor benefits, mandatory overtime, unsafe work environment, inequitable treatment of women and workers of color, poor communication and management.

Given this long record of negatives and their well-known performance in our own city of Tacoma, we strongly urge you to save our beautiful city, and put the economic prosperity of all the organizations and businesses as well as the health and clean air of our residents and visitors first!

*As a child and adolescent growing up in the McKinley neighborhood, I (Julie) experienced the noxious odors and health consequences firsthand as I had regular and quite severe asthma until I moved away after high school. Other members of my family also suffered greatly from asthma. We strongly urge you NOT to extend a permit for Darling Rendering anywhere in our city!*

Sincerely,

Julie Andrzejewski and Ellen Floyd, Co-Chairs  
On behalf of the Members of Indivisible Tacoma  
[Julieruth17@gmail.com](mailto:Julieruth17@gmail.com)  
507 469-2072

## 15. Courtney Davis

**From:** [Courtney Davis](#)  
**To:** [Public Comment](#)  
**Subject:** Please do not allow the animal rendering plant to reopen!  
**Date:** Wednesday, April 17, 2024 7:00:13 AM

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Hello,

Thank you for giving the public the opportunity to comment on this important issue. Please do not allow the animal rendering plant to reopen. There are so many concerning factors that would greatly affect the health and safety of the public:

1. A Large Radius of People, Organizations, and Businesses are Affected: Downtown Tacoma, Eastside Tacoma, Northeast Tacoma, Hilltop, Stadium District, and Fife are all within three miles of the rendering plant (the radius of people who brought a previous lawsuit against Darling). The businesses, workplaces, schools, hospitals, tourist destinations (museums, restaurants, etc.) and homes in these places all experience the plant's revolting smell, harmful health effects, and deleterious economic impacts on a regular to semi-regular basis depending upon which way the wind is blowing.
2. It is Impossible to "Scrub" the Odors Even with the Best Equipment: Even a company that specializes in making equipment to prevent rendering smells (Aulick) admits that odor control (and the accompanying serious safety hazards of toxicity) emanating from the processing of animal carcasses in various stages of putrefaction, is a challenging problem. There simply are no scrubbers available that can eliminate the stench. Darling has faced a long list of disputes and lawsuits with no satisfactory resolutions: settlements are small and do not alleviate the problems. <https://aulickchemical.com/case-studies/air-discharge-odor-control-at-a-rendering-facility/>
3. Darling Industries Has a History of Violations and Avoidance of Accountability: Darling Industries has a history of violating regulations and avoiding accountability. They emit volatile organic compounds (VOCs), and hazardous animal meal in the form of dust. The violations are very difficult to prove and enforce, and the consequences and fines so miniscule there is no incentive for compliance or even response. <https://casetext.com/case/sines-v-darling-ingredients-inc-1>
4. Darling Industries Have a History of Water Contamination with Meat/Poultry Products, Fecal Bacteria, and other Industrial Wastes: Darling plants in other states have a long documentable history of contaminating rivers and saltwater bays causing algae blooms, and devastation of fish, water life, and nearby vegetation. <https://www.meatpoultry.com/articles/27246-darling-ingredients-subsiary-to-pay-540-000-for-environmental-violations>
5. Darling Industries Have a Long History of Maltreatment and Exploitation of Workers: Darling Rendering Industries are known for low pay, job insecurity, poor benefits, mandatory overtime, unsafe work environment, inequitable treatment of women and workers of color, poor communication and management.

Thank you for your time and consideration,

Courtney Davis  
Tacoma, WA (District 3)

## 16. Ann Dorn

**From:** [Ann Dorn](#)  
**To:** [Public Comment](#)  
**Subject:** Darling Ingredients Inc  
**Date:** Wednesday, April 17, 2024 2:35:04 PM

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Good afternoon,

I am writing to strongly oppose the proposed Order of Approval allowing Darling Ingredients Inc to replace rendering equipment at their Tacoma facility.

Darling Ingredients has an extensive track record of noncompliance and safety lapses. A more robust compliance program as outlined in the proposed Order of Approval will not mitigate Darling Ingredient's decision to prioritize profit over worker safety and community well-being. Darling Ingredients has repeatedly chosen to pay fines rather than follow the rules, and there is no reason to think that anything about their business model has changed. Fines are simply a cost of doing business for Darling Ingredients, but for thousands of Eastside Tacoma residents and Darling workers, the impact of the odor leaks, fires, equipment failures and other environmental and safety impacts will continue to threaten our community and families.

The proposed Order of Approval does not solve the underlying problem, which is that Darling Ingredients has a history of ignoring worker and environmental impacts on the community. Knowing this, the Puget Sound Clean Air Agency has a duty to deny this permit.

Thank you,

Ann Dorn

## 17. Diane Burke

**From:** [diane](#)  
**To:** [Public Comment](#)  
**Subject:** Darling rendering plant  
**Date:** Saturday, April 13, 2024 4:52:08 AM

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Tacoma may be the grit City but the Darling rendering plant needs to be repurposed. Tacoma doesn't need a business that causes pollution, labor violations, and various non compliance issues. Let's clean up our city.

Thank you,

Diane Burke

## 18. JP Kemmick

**From:** [Jo Kemmick](#)  
**To:** [Public Comment](#)  
**Subject:** Say no to animal rendering plant in Tacoma  
**Date:** Friday, April 12, 2024 8:29:18 PM

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Hello,

I'm writing to urge you not to permit the animal rendering plant in Tacoma. Yes, the odor is enough of a reason, but the company also has a long history of putting profit over people and the planet. Not the kind of company we need polluting the water and air of Puget Sound.

Thank you,  
JP Kemmick  
2906 N Mason Ave  
Tacoma, WA 98407



19. Scott Nelson

From: [S. Nelson](#)  
To: [Public Comment](#)  
Subject: Order 12348 Public Comment  
Date: Monday, April 15, 2024 10:49:03 PM

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To Ralph Munoz:

Hello Mr Munoz, this is a public comment about the Darling Ingredients lease order.

As you and everyone in Tacoma are aware, the main concerns on the minds of the public are about odor and air pollution. Specifically the absolutely horrendous odor that used to come from Darling Ingredients that we all fear will return when they resume operations. This fear is warranted without a doubt.

No amount of commerce, no amount of goodwill between the city and business leaders, no amount of job creation, is enough to allow that odor and pollution to return. The quality of life, and the health of Tacoma residents, including thousands of children whose schools are not far from the tideflats, are directly and profoundly affected by this order. Tacoma is a better city for not having to endure that pollution.

So the question is: how can we be sure that this pollution will not return? The order is weak. At first read, it sounds fine. But it has loopholes and vagueness. And it lacks teeth as far as penalties for pollution release into the air. It specifies a number of things that Darling "should" do. There are so many areas in the order that require near constant observation and review, that it is not believable that this observation, compliance, and holding feet to the fire, will take place.

Will a "Control Officer" be onsite? How often will he/she inspect and enforce? Large corporations have a history of conveying smoke and mirrors to achieve their profit seeking goals, only to get away with noncompliance via loopholes. This pollution, and its effects on our city, is too important to be left to vagueness. The order needs to provide a clear and strong process for shutting down this plant if the pollution is released.

Has Darling, or similar companies, ever used this equipment to positive effect in other cities? Or is Tacoma the test bed? This question should be addressed in the order. Because if Tacoma is the test bed, the public needs to know this. And if this equipment has been used elsewhere, the public deserves to see some data on the results.

This order needs further information before it should be approved, Or else it should be denied. If Tacoma is to continue in a positive trajectory, then this order needs to ensure that Darling either does not resume operations here, or they need to provide clear and convincing arguments that they will not re-afflict us with their pollution.

Thank you,  
Scott Nelson  
Tacoma McKinley Hill resident

## 20. Carol Hendershot

**From:** [joe hendershot](#)  
**To:** [Public Comment](#)  
**Subject:** Darling Rendering Plant  
**Date:** Friday, April 12, 2024 3:58:51 PM

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Dear Gentlemen and Gentlewomen,

Our family lives in the Summit-Waller area of Pierce County. I can tell you that during the heat of summer we can smell the plant's putrifaction of death all the way to E 72nd St. and beyond. It impacts people with diseases of the heart and asthma, to name a few. (Schiffman SS, Walker JM, Dalton P, Lorig TS, Raymer JH, Shusterman D, Williams CM. Potential health effects of odor from animal operations, wastewater treatment, and recycling of byproducts. J Agromedicine. 2004;9(2):397-403. PMID: 19785232.)

We deserve clean air. Our health depends on it.

Sincerely,

Carol Hendershot

## 21. Stacy Oaks

See hearing transcript, below. This comment expressed opposition to the operation of this facility and encouraged the Agency to be as stringent as possible in its permitting. The comment also raised concerns regarding odors, health disparities in the area, and worker protection. The comment also referred to the environmental justice requirements in the state's HEAL Act.

## 22. Janeen Provazek

See hearing transcript, below.

## 23. Aife Pasquale

See hearing transcript, below.

These comments raised concerns related to worker safety and previous violations of regulations and permits. They also included references to the choice of location for this facility and to its lease agreement.

## 24. Kit Burns

See hearing transcript, below. This comment mentioned previous instances of malfunctions at the Darling facility that led to very strong odors offsite. The comment asserts that the facility would cause harm to the community. The comment also states that recent gains in air quality should not be rolled back.

## Hearing Transcript

*The following is the transcript of the public hearing on draft Order of Approval number 12348, held by Zoom from 4 PM to 6 PM PDT on April 17, 2024. The transcript was generated automatically by Zoom, and there are some minor transcription and spelling errors and unusual punctuation and line breaks. However, these errors do not materially change any of the content of the comments. Comment numbers have been added to correspond to the references above.*

John Dawson: Alright good afternoon, everybody, and welcome to Puget. Sound, clean Air Agency public hearing for the draft notice of construction, order of approval. Number 1, 2, 3, 4, 8 for darling ingredients. My name is John Dawson. I am the engineering manager at Puget Sound Clean Air Agency. I will just give a brief overview of the purpose of today's hearing before we get into comments. So this project that's covered by the hearing is for the replacement of much of the equipment at the darling ingredients, facility that had been previously destroyed in a fire. This project includes an increase in air pollution controls from what had previously been at the facility and in the monitoring and requirements and emissions testing requirements as well for today's hearing this is we are accepting comments to address the draft permit and the compliance with the applicable agency regulations. We plan on allowing up to 5 min per commenter. If there's a a lot of commenters we might have to cut that back to 3 min but we should plan on 5 min per speaker

The agency will not be responding today. Our response will be in the final determination document. Once we make our our final decisions on this application. The comment period extend on this draft order of approval extends through Friday, April nineteenth. So you may also submit comments in writing through 5 pm. On Friday. And the email address to submit those comments is publiccomment@psccleanair.gov. Again. That's publiccomment@psccleanair.gov. This hearing, as I mentioned, is being recorded Also the hearing will extend all the way to 6 PM. So if we do run out of commenters, we will go into a break for a little bit to see if any new commenters want to come online. So you might see after our initial round of commenters has come on we might take a break for a bit, and then reconvene to see if any new commenters have joined

We will be getting to the comment portion of the hearing in just a minute. For anybody who would like to comment. Actually, this would be a good time to do so to please use the raise hand function which is under reactions in zoom, and then I will call on everybody with a raised hand, one at a time. When I call on you, please unmute yourself and feel free to turn on your camera if you would like and Betsy, I will just check with you very quickly before we start. Are there any preliminaries that I forgot? Or should we head straight into our comments.

Betsy Wheelock: John, I think you gave the details that for the hearing that needed to be done so thank you. I don't have anything to add.

John Dawson: Alright. So with that we will go into the comments as I mentioned. If you would like to make a comment, please use the raise hand function in zoom which is under the reactions. Menu right now there is one hand raised, and that is Barbara church. So, Barbara, if you are ready to give your comments it looks like you've unmuted yourself and turned on your camera, so we will. I will turn it over to you and go ahead.



**(Comment #12)**

Barbara Church: Thank you. The sun shining. So that's great. But okay. So my name is Barbara Church. oh, hold on, because I have a written comment and I oh, shoot! Okay. So

Here it is. I live within a 2 mile radius of the port of Tacoma, in northeast Tacoma.

Whenever I drove down 509 into the city, my granddaughter would always say how awful the smell was. I thought the same, and I always rolled up my windows and turned on my air to recirculate. As I drove through the port one of the places I like to walk, because in the northeast area where I live. There aren't many sidewalks, so I would go into do on the Dock Street just to exercise and walk my dog and sometimes eat at the restaurants there and there. Oh, on different occasions I would smell the stench from the port and immediately just end my walk, and I also stop eating at the Dock Street restaurants, too. and reach but I did. I have returned since starting industry close down, because I I don't smell that stench there like I used to.

I can only imagine how hard it must be for port employees to be inhaling that that smell that the industry produces darling industries, has a history of violating regulations and avoiding accountability. Not only here in Tacoma, but in other areas.

I've lived through the smelters of Aroma of Tacoma. Please don't let that aroma of darling industries be your legacy. Listen to nearby residents and businesses, and don't allow their permit to move forward. please hear and act on the requests for cleaner industries at the port of Tacoma. Thank you.

John Dawson: Hey it. thank you, Barbara. Think we have another hand up from just getting my timer reset. Here we have another hand up from Stacy Oakes.

Stacy, if you're ready you've unmuted yourself. Feel free to turn on your camera if you would like. And I you can begin your comment now.

**(Comment #21)**

Stacy Oaks: Thank you so much. My name is Stacey Oakes, and I'm an organizer with 3 50 Tacoma, an organization that works towards environmental justice. I also just wanted to take a second before I begin to acknowledge that all of this is happening on the lands of the Puyallup tribe. I just wanna urge you to do everything you can to, if possible, not allow this permit to go through and not allow this industry to reopen. And if you do to put every stringent You know everything that you can in place, not just things that seem to be at a reasonable cost to this company, but literally everything. You are legally allowed to make them do.

As Barb said the smell and the health impacts that usually accompany bad smells are really affecting so many people. You're talking about people that live right there, people that work there, the businesses, businesses that are losing customers because of that smell. A lot of the places to where you're gonna be getting that already. Have already have health disparities because of where they live. And some of the other polluting businesses in Tacoma.

There's already been previous lawsuits against this company for not being in compliance for kind of skirting on safety. There's a labor exploitation claims that have been made against this company.

So we know that they're going to be doing things, not by the book. We know that they're going to be doing whatever's the cheapest. and that has real life consequences for our communities.

We have to. We have to start finding ways to not just rubber stamping these business as usual decisions and letting them continue to go through.

and that is on all of us folks to just show up and speak up like Barb and I showing up today, and folks in your position with this job where you can look and really find out what all is in your discretion to do, and

we need you to do it. The Heal Act, which was recently passed makes it mandatory for all aspects of government in Washington to consider environmental justice. I would urge you to think about how this could impact what you're legally able to do in this decision. Thank you so much.

John Dawson: Thank you, Stacey.

We have a hand up from Janine provazic. Sorry if I mispronounce that janine. If you're ready to comment feel free to unmute yourself, and you can start your comment whenever you're ready.

Barbara Church: She's muted.

John Dawson: Yes, is it? Janine? I think that's how you pronounce it. We you're still muted, if you your hand is up, so I think you have a comment for us. But we can't hear you currently.

Janine. Could we try again to see if you are able to get yourself unmuted.

Think she might have dropped off. So we will give her a minute to come back.

It looks like we have had a couple other people join. As I mentioned before, if you would like to have a comment please use the raise hand function in zoom, which is under reactions you can raise your hand, and then I will recognize commenters one at a time. We do have a commenter John Elrad has raised his hand.

#### **(Comment #5)**

Jon Elrod: Hey? Good afternoon, John.

My name is John Elrad, and I'm Vice President of Environmental Affairs for darling ingredients. North America. darling ingredient strives to be a good corporate citizen and a neighbor in every community where we operate. and the safety and wellbeing of our employees, contractors, and the community is our top priority. We have comprehensive processes and protocols and environmental expectations that are part of our day to day operations, and we continually evaluate our mission control technologies and management best practices and work to improve where our opportunities exist.

The new facility we plan to construct in Tacoma will have enhanced emission and odor controls, including upgraded and upsized air scrubber technology and structural air seals.

Darling ingredients is committed to continuing to work collaboratively with the Puget sound clean air agency and the local community, and is committed to complying with the draft, approval and the regulations therein.

We play an important role in the community by supporting the agricultural industry, helping to reduce waste from livestock production and providing jobs and economic opportunities in the region.

Darling sincerely appreciates the opportunity to provide comment on the sort of approval and looks forward to its issuance. Thank you very much.

Janeen Provazek: So you see.

John Dawson: Thank you, John. It looks like Janine is back on and has unmuted herself. So, Janine you're ready for your comment. Go right ahead.

#### **(Comment #22)**

Janeen Provazek: Yes, Hello! Sorry I was having trouble with my tech. I just wanted to say that we are facing an increasing climate crisis. We all know that I don't think anyone can deny that any longer. and we have a. The city has an authority. They have the authority to say no to a company that has not been a good company, and I'm sorry to say that darling rendering plan has not been a good company. They have had a history of poor follow through on zoning laws, on compliance rules. They have had issues with their employees, you know. Why would we want to extend a lease to someone that has already been so unaccountable. We we don't have to have. We have a lot of people that would like to come to Tacoma. That would be good companies that aren't gonna pollute the air and continue to kind of. And I'm gonna say this a little bit provocatively, give the finger to the city whenever they feel like it, when they don't want to follow something.

And even if we raise the level of the guidelines, which I understand they're supposed to match sort of the California standards which have been higher than our city. That that doesn't change. Who the company is. It just means they're just gonna find another way to get around things. You know, once you've had a company that's had this many mistakes made and lack of accountability so many times. Surely we could say no, our arts, our city, deserves better than that. The community members deserve better than that. We, our city has been one of the more polluted cities in the United States. and people just keep forgetting that and saying, Sure, let's just let another rendering plant that has not been a great, a great landlord at all. We'll just let them continue. I strongly urge you to say no to this company wanting to it, it reapply for a lease and improve, make their improvements. I don't. I? I don't think we can trust that, and we don't have to we don't have. We're not pushed into a corner here. So let's you use our thoughtful authority to be more protective of the harm that this company has already caused. Thank you very much.

John Dawson: Thank you, Janeen.

John Dawson: Right now, there are no other hands up does anybody else who's currently on here at the hearing, want to make a comment. You can use the raise hand function under the under reactions. Right? I think I'll make one more call for comments before we go to a break. Does anybody wish to make a comment? You can use the raise hand function under reactions?

No, it looks like we have no commenters currently. So I will say that we will go into a break until shall we say 4, 40?

We'll come back at 4 40 and see if any new commenters have joined.

John Dawson: Thank you. Welcome back. This is the hearing for Puget. Sound, clean air agency draft order of approval number 1, 2, 3, 4, 8 for darling ingredients we are. Accepting public comment related to the draft order of approval.

As I mentioned previously, we're allowing up to 5 min per comment if anybody here on at the hearing would like to comment please use the raise hand function in zoom. It's under the reactions. Menu.

So if anybody would like to comment, please use the raise hand function in zoom, and then I will call on everybody with a hand raised.

We do have a commenter. It looks like Kit Burns would like to speak.

So, Kit, if you are ready. Feel free to unmute yourself. And we can start your comments.

**(Comment #24)**

Kit Burns: Yeah. My name is Kit Burns, and I live in Tacoma, on the hilltop area. I've lived in Tacoma for 30 years. I've smelled the effects of what damage the air quality happens when they have an incident at

these darling plans, and I've been told there was one incident, but I recall 3 incidents, and I don't recall the time or year right now. but I remember the air was virtually unbreathable. and what we were breathing that was so unbreathable. We have no idea what the chemicals or toxins that are in that. and this company has had a record that they've done violations that violate various codes. Although I will tell you this, I've also told. I'm told that. Well, you really can't measure this. Well, you should be able to major measure a change in the air quality. and it would be absurd to me to allow something that causes harm to our environment when we know there are so many harms. And for us to knowingly accept a plant like this that has no control over its air quality standards that basically gags the entire community

with the serious harm. And again, it's like what corporations often do is, they say, well, we don't know the harms. We don't know what's in it they've done this with fracking, for example. and they say, Well, we don't know the chemicals in here, or we can't share them with you. And so we harm our own communities this way. So something has to be done to prevent that. And this is an opportunity to say, Well, if you can't be a responsible partner of the community, if you can't keep the air clean, if you pollute the water and have no, the public has no recourse this is harmful to the city of Tacoma.

I grew up in Tacoma I went to Bellarmine High School from 1965 to 1970, I should say 66 through 70. It only took me 4 years to get through high school and at that time my brother was always telling me, and and for those who have been around that long he told me it was common knowledge that Tacoma was the armpit of the nation. Well, our air has been greatly improved, although we're still not there.

we should take a step going back into the past. This should not be allowed. I'm sure that nobody even thought of the harm that Sarco put on the U.S. Community and the neighboring lands.

So I would just like to speak against any approval in this regard. They've functioned without this, since their plant burned down. It should just be kept close, and it should not be reauthorized especially like, I say, when they say there's no way of knowing what's in the air. They have no way of preventing the contamination. And we do know that it does shorten our lives. So thank you for your time.

John Dawson: Thank you, Kit.

Would if anybody else would like to comment please use the raise hand function under the reactions menu. as I mentioned previously. We are also accepting written comments through 5 Pm. On Friday, April nineteenth, and you can submit written comments to [publiccomment@pscleanair.gov](mailto:publiccomment@pscleanair.gov) are, are, are there any anybody else here in the hearing who would like to make a comment? Now, please use the raise hand feature. Alright, that appears to be all the commenters we have on right now. So I think we will move into a break. and we can reconvene at 5 o'clock to see if any new commenters have joined, so we will reconvene at 5 o'clock.

John Dawson: Alright, it's now 5 o'clock, and we are back with the hearing for draft notice of construction. Order of approval. Number 1, 2, 3, 4, 8 for darling ingredients.

If anybody has comments they would like to make. Please use the reactions, raise hand feature, and I will call on everybody who has a raised hand for their comments again, as I mentioned previously, we are accepting written comments through 5 pm. On Friday, April nineteenth, you can email written comments to [publiccomment@pscleanair.gov](mailto:publiccomment@pscleanair.gov). and if anybody would like to make a comment here at the hearing feel free. You may please use the reactions button and use the raise hand feature in zoom, and I will call on anybody with a raised hand.

Betsy Wheelock: John, if I might offer as well. I see some folks are joining from their phone. So even if even if you can't raise your hand, or or can't find that you're you're welcome to unmute and join and and say or comment, if that's what you'd like to do.

John Dawson: So we do have a raised hand from Kris. If you'd like you may unmute yourself feel free to turn on your camera if you'd like as well or not, that's your choice. And we are ready for your comment. If you're ready.

**(Comment #6)**

Kris's iPhone: Hello! My name's Kris Fish. I'm a Pierce County resident. I live in queue alab. And I want to comment on what a vital service that, darling, provides our community with the disposal of proper disposal of food wastes and also good solid union jobs within our community that support our community and this great economy that we live in Pierce County. And I'd like the the Council and everybody to definitely hear that out that this is vital to proper sanitation, help health of our community. So I'm a hundred percent behind the approval for the building permit.

John Dawson: Thank you, Kris. as Betsy mentioned. If anybody else has a comment, you may use the reactions, raise hand feature, or just feel free to unmute yourself. And you can go ahead and speak.

**(Comment #23)**

Aife Pasquale: Hello! My name is Aife Pasquale. and I'd like to say a few things. I also am a pro working class person, and that's one of the reasons I actually am against the dialing industries. Like renewal of their lease, because well. historically, darling, as a company has mistreated their workers, including creating unsafe work environments. There was actually a darling industries company, not the one in Tacoma, but one in the United States where a employee was actually burned alive inside of an industrial oven. So not not great working conditions, I would say. Darling, industries also has a history of water, contamination with meat and poultry products, as well as fecal bacteria and other industrial waste. So it would be a terrible thing to put in our port. Because, you know, the Commencement Bay is already incredibly and ecological peril. I also wanted to say that They, the one here in the port has had a history of violations and avoidance of accountability. They've omitted vocs volatile organic compounds. In the form of dust. And these violations are, you know, difficult to prove and enforce, and so the consequences And like fines from them. Oftentimes it's easier for them to pay the fines than it is to actually deal with the problem. And I would like to say, like, you know, the port of Tacoma has become somewhat of a sacrifice zone, and it belongs to the Puyallup tribe. and so I think we should respect the reservation and the Treaty laws, and protect the land that they live on rather than continue to environmentally devastated. And that's all I have to say. Thank you.

John Dawson: Thank you, Aife.

John Dawson: So if anyone else would like to comment feel free to raise your hand in zoom or you could just unmute yourself and start with your comments. As I mentioned, we are also accepting written comments through 5 PM. On Friday. And you can email those to [public.comments@psccleanair.gov](mailto:public.comments@psccleanair.gov).

One more call for comments before we go into a break. Does anyone have a comment? Feel free to unmute yourself. That appears to be all the commenters we have right now. We will go into a break until 5, 25 so we will reconvene at 5 25, and see if any new commenters have joined.

John Dawson: It is now 5, 25, and we are reconvening. I believe a few people have joined the hearing. If anybody has joined and would like to make a comment. This is the public hearing for Puget. Sound, clean air agency draft order of approval. 1, 2, 3, 4, 8 for darling ingredients. If anybody would like to make a comment. You may either use the reactions function. The raise hand button, and I can call on you or feel free to simply unmute yourself and begin your comment.

As I mentioned, we are, still accepting written comments through 5 pm. On Friday. You can email those to [publiccomment@PSCleanair.gov](mailto:publiccomment@PSCleanair.gov).

And again, if anybody here in this hearing would like to make a comment feel free to simply unmute yourself and begin your comment alright. This is one last check for comments before we go to our next break. Does anybody have a comment? Feel free to unmute yourself? Alright! Don't appear to be any comments right now. So we will go into a break until 5 50. That's 5 5 0, and we will reconvene at 5 50 and see if anyone else has any comments.

John Dawson: Welcome back to the hearing. This is Puget sound, clean air agencies, hearing regarding the draft order of approval. Number 1, 2, 3, 4, 8

for darling ingredients. We are accepting comments on the draft permit.

If anybody here in the hearing would like to make a comment on the draft permits. You may unmute yourself and present your comments. As I mentioned previously. If you would prefer to submit your comments in writing. We're accepting comment through 5 pm. On Friday, April nineteenth. And you can email your comments to [publiccomment@PSCleanair.gov](mailto:publiccomment@PSCleanair.gov).

As I mentioned, we are going to hold this hearing open until 6 o'clock. I don't think we're gonna go into a break, though. I think we're just gonna hold this in session until 6. As I said, feel free to unmute yourself and give your comment if you have one. in case anyone just joined. This is the Puget sound clean air Agency, hearing on the draft order of approval. Number 1, 2, 3, 4, 8 for darling ingredients. If you have a comment you'd like to make about the draft order of approval. feel free to unmute yourself and give your comments. am going to pause the recording and start it back up again at a couple of minutes before 6. It is now 5, 58, and I've restarted the recording. This is the public hearing for Puget sound, clean air agency draft order of approval. Number 1, 2, 3, 4, 8 for darling ingredients. This is the last call for comments at this hearing.

If you have a comment related to the draft order of approval, that you may unmute yourself and deliver it. Now we will be accepting written comments through 5 Pm. On Friday, April nineteenth. and you can submit those written comments to [publiccomment@PSCleanair.gov](mailto:publiccomment@PSCleanair.gov).

John Dawson: It is now 6 o'clock, and that concludes this hearing.