



LANE REGIONAL AIR PROTECTION AGENCY

1010 Main Street, Springfield, Oregon 97477
(541) 736-1056

STANDARD AIR CONTAMINANT DISCHARGE PERMIT (ACDP)

Issued in accordance with provisions of Title 37, Lane Regional Air Protection Agency's Rules and Regulations, and based on the land use compatibility findings included in the permit record.

Issued To:
Costco Wholesale Corporation
P.O. Box 35005
Seattle, Washington 98124

Facility Address:
Costco Gasoline (Loc. No. 17)
2828 Chad Drive
Eugene, Oregon 97408

Permit Number: 201304
Permit Type: Standard
SIC: 5541 – Gasoline Service Stations
Issuance Date: December 20, 2022
Expiration Date: January 3, 2025

Information Relied Upon:
Application Number: 68840
Dated: 10/19/2022

Land Use Compatibility Statement:
From: City of Eugene
Date: 06/09/10

Fee Basis – Title 37, Table 1:
Part B:
32. – Gasoline Dispensing Facility (GDFs)
Part C:
4. – All sources that request a PSEL equal to or greater than the SER for a regulated pollutant

Permitted Sources:
3 – 30,000 gallon underground storage tanks (UST) with 12 Dispensers

Issued
By: Steven A. Dietrich
Steven A. Dietrich, Director

Effective
Date: 12-20-22

Permitted Activities

1. Until this permit expires or is revoked, the permittee is herewith allowed to discharge exhaust gases containing contaminants only in accordance with the permit application and the requirements, limitations, and conditions contained in this permit. This specific listing of requirements, limitations, and conditions does not relieve the permittee from complying with all other rules of Lane Regional Air Protection Agency (LRAPA).

Emission Unit Description

2. The emission units regulated by this permit are the following:

Emission Unit	Emission Units ID	Pollution Control Device
Three (3) – Gasoline Underground Storage Tanks (USTs) with 12 Dispensers	EU-1	Vapor Balance System (stage I) on USTs

Plant Site Emission Limits (PSELS)

3. The emissions from all sources located at the facility must not exceed the PSEL below. The PSEL apply to any consecutive 12 calendar month period. [LRAPA 42-0041(2), 42-0041(4)(b) and 42-0080(4)(c)]

Annual Plant Site Emission Limits (PSELS)

Pollutant	Plant Site Emission Limits (ton/year)
VOC	99
HAP (Individual)	9
HAP (Aggregate)	24

- 3.a. Any changes in operation that may increase the emissions above the PSEL must be approved by LRAPA. Failure to do so may result in enforcement actions being taken by LRAPA. [LRAPA 37-0020]

Production Limits

4. The permittee must not exceed 39,900,000 gallons of gasoline for any 12 consecutive calendar month period. [LRAPA 42-0080(4)(d)]

PSEL Monitoring and Compliance

5. ***By the 15th working day of the month***, the permittee must determine compliance with the previous consecutive 12 calendar month PSEL. Compliance with the PSEL is determined for each consecutive 12 calendar month period based on the following calculation for the pollutant. [LRAPA 34-016(1) and 42-0080(4)(c)]

- 5.a. The permittee must calculate the total calendar month emissions of VOC using the following equation:

Equation 1

$$VOC_{12} = \sum_{i=1}^{12} \frac{(T \times EF)}{2000}$$

Where: VOC₁₂ = The total emissions of VOC over the previous 12 consecutive calendar months, in tons;
 T = Throughput per month, in 1,000 gallons (kgal);
 EF = Emissions factor in pounds per thousand gallons;
 i = Each calendar month; and
 2000 = Pounds per ton.

5.b. The permittee must calculate the total calendar month emissions of Aggregate HAP using the following equation:

Equation 2

$$HAP_{12} = \sum_{i=1}^{12} VOC_{12} \times R^{HAP}$$

Where: HAP₁₂ = The total emissions of HAP over the previous 12 consecutive calendar months, in tons;
 E₁₂ = The total emissions of VOC over the previous 12 consecutive calendar months, in tons;
 R^{HAP} = HAP ratio percent;
 i = Each calendar month; and

Emission Factors

Source	Emission Factors	Units
VOC	4.902	lb/kgal
Aggregate HAP*	0.01885	Ratio percent

*Individual HAP does not have to be calculated because they are below the minimum level.

Applicable Requirements

6. The affected source to which the emission standards apply is each gasoline dispensing facility (GDF). The affected source includes each gasoline cargo tank during the unloading of gasoline to a GDF and also includes each storage tank. [LRAPA 44-190(1)]
7. The permittee that has any gasoline storage tanks with a capacity of 250 gallons or more must comply with the work practices requirements and the submerged fill requirements in Conditions 16 through 20. [LRAPA 44-190(3)]
8. The permittee, whose total volume of gasoline that is loaded into all gasoline storage tanks greater than 250 gallons capacity must comply with the vapor balance requirements in Conditions 21 through 24 if either: [LRAPA 44-190(4)]

- 8.a. The annual throughput is 480,000 gallons or more in any 12 consecutive months; or [LRAPA 44-190(4)(a)]
- 8.b. The monthly throughput is 100,000 gallons or more, as calculated on a rolling 30-day basis. [LRAPA 44-190(4)(b)]
9. The permittee, upon request by LRAPA, must demonstrate that the annual and average monthly gasoline throughput is below any applicable thresholds. [LRAPA 44-190(5)]
10. The permittee must comply with Condition 23 for any gasoline storage tank equipped with vapor balance system. [LRAPA 44-190(6)]
11. The permittee that installs a new tank with a capacity of 10,000 gallons or more, must equip the new tank with vapor balance system that meets the requirements in Conditions 21 through 24 (44-240). [LRAPA 44-190(7)]
12. If the permittee's GDF exceeds the applicable throughput thresholds, the permittee will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable threshold. [LRAPA 44-190(9)]
13. The permittee must meet the criteria for gasoline storage tanks and equipment necessary to unload product from cargo tanks into the storage tanks at the GDF as specific in Conditions 6 through 12. The equipment used for refueling of motor vehicles is not covered by LRAPA 44-170 through 44-290 with the exception of topping off. [LRAPA 44-210(1)]

General Duties to Minimize Emissions

14. The permittee must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to LRAPA and the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [LRAPA 44-225(1)]
15. The permittee must keep applicable records and submit reports as specified in Conditions 34 and 37. [LRAPA 44-225(2)]

Work Practice and Submerged Filled Requirements

16. The permittee must take reasonable precautions to prevent gasoline vapor releases to the atmosphere. Reasonable precautions include, but are not limited to, the following: [LRAPA 44-230(1)]
 - 16.a. Minimize gasoline spills; [LRAPA 44-230(1)(a)]
 - 16.b. Do not top off or overfill vehicles tanks. If a person can confirm that a vehicle tank is not full after the nozzle clicks off, such as by checking the vehicle's fuel tank gauge, the person may

- continue to dispense fuel using best judgement and caution to prevent a spill; [LRAPA 44-230(1)(b)]
- 16.c. Post a sign at the GDF instructing a person filling up a motor vehicle to not top off vehicle tanks; [LRAPA 44-230(1)(c)]
- 16.d. Clean up spills as expeditiously as practicable; [LRAPA 44-230(1)(d)]
- 16.e. Cover all gasoline storage tank fill-pipes with a gasketed seal and all gasoline containers when not in use; [LRAPA 44-230(1)(e)]
- 16.f. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators; [LRAPA 44-230(1)(f)]
- 16.g. Ensure that cargo tanks unloading at the GDF comply with Conditions 16.a, 16.d, and 16.e. [LRAPA 44-230(1)(g)]
17. The permittee must ensure that any cargo tank unloading at a GDF equipped with a functional vapor balance system must connect to the vapor balance system whenever gasoline is being loaded. [LRAPA 44-230(2)]
18. The permittee must ensure that all owners and operators of cargo tank only load gasoline into storage tanks at the facility by utilizing submerged filling as specified in Conditions 18.a, 18.b or 18.c. The applicable distances in Condition 18.a and 18.b must be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank. [LRAPA 44-230(3)]
- 18.a. Submerged fill pipes installed on or before November 9, 2006, must extend to no less than 12 inches from the bottom of the storage tank. [LRAPA 44-230(3)(a)]
- 18.b. Submerged fill pipes installed after November 9, 2006, must extend to no less than 6 inches from the bottom of the storage tank. [LRAPA 44-230(3)(b)]
- 18.c. Submerged fill pipes not meeting the specifications of Conditions 18.a or 18.b are allowed if the permittee can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by LRAPA during the course of a site visit. [LRAPA 44-230(3)(c)]
19. The permittee must have records available within 24 hours of a request by LRAPA or the EPA Administrator to document gasoline throughput. [LRAPA 44-230(5)]
20. Portable gasoline containers that meet the requirements of 40 CFR Part 59 Subpart F are considered acceptable for compliance with Condition **Error! Reference source not found..** [LRAPA 44-230(7)]

Vapor Balance Requirements

21. Except as provided in Condition 22, the permittee must meet the requirements in either Condition 21.a or 21.b for all affected gasoline storage tanks: [LRAPA 44-240(1)]
- 21.a. The permittee must install and operate a vapor balance system on gasoline storage tanks that meets the design criteria in Conditions 21.a.i through 21.a.viii. [LRAPA 44-240(1)(a)]
- 21.a.i. All vapor connections and lines on the storage tank must be equipped with closures that seal upon disconnect. [LRAPA 44-240(1)(a), Table 4(a)]
- 21.a.ii. The vapor lines from the gasoline storage tank to the gasoline cargo tank must be vapor-tight, as defined in LRAPA 44-180. [LRAPA 44-240(1)(a), Table 4(b)]

- 21.a.iii. The vapor balance system must be designed such that the pressure in the tank truck does not exceed 18 inches water pressure of 5.9 inches water vacuum during product transfer. [LRAPA 44-240(1)(a), Table 4(c)]
- 21.a.iv. The vapor recovery and production adaptors, and the method of connection with the delivery elbow, must be designed so as to prevent the overtightening or loosening of fittings during normal delivery operations. [LRAPA 44-240(1)(a), Table 4(d)]
- 21.a.v. If a gauge well separate from the fill tube is used, it must be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in Condition 18. [LRAPA 44-240(1)(a), Table 4(e)]
- 21.a.vi. Liquid fill connections for all systems must be equipped with vapor-tight caps. [LRAPA 44-240(1)(a), Table 4(f)]
- 21.a.vii. Pressure/vacuum (PV) vent valves must be installed on the storage tank vent pipes. The pressure specifications for PV vent valves must be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, must not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water. [LRAPA 44-240(1)(a), Table 4(g)]
- 21.a.viii. The vapor balance system must be capable of meeting the static pressure performance requirement of the following equation: [LRAPA 44-240(1)(a), Table 4(h)]

Equation 3

$$Pf = 2e^{-500.887/v}$$

Where:

- Pf = Minimum allowable final pressure, inches of water.
- v = Total ullage affected by the test, gallons.
- e = Dimensionless constant equal to approximately 2.718.
- 2 = The initial pressure, inches water.

- 21.b. If, prior to January 10, 2008, the permittee operates a vapor balance system on all affected tanks at the GDF that meets either requirement listed in Conditions 21.b.i or 21.b.ii, the permittee will be deemed in compliance with LRAPA 44-240(1)(b). [LRAPA 44-240(1)(b)]
 - 21.b.i. Achieves emissions reduction of at least 90 percent. [LRAPA 44-240(1)(b)(A)]
 - 21.b.ii. Operates using management practices at least as stringent as those in Condition 21.a. [LRAPA 44-240(1)(b)(B)]
- 22. The permittee must ensure that cargo tanks unloading at the facility comply with the work practice requirements of Condition 16 and management practice of Condition 22.a through 22.f: [LRAPA 44-240(3) and LRAPA 44-240(3), Table 5]
 - 22.a. All hoses in the vapor balance system are properly connected, [LRAPA 44-240(3), Table 5(i)]
 - 22.b. The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect, [LRAPA 44-240(3), Table 5(ii)]
 - 22.c. All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight, [LRAPA 44-240(3), Table 5(iii)]

- 22.d. All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and [LRAPA 44-240(3), Table 5(iv)]
- 22.e. All hatches on the tank truck are closed and securely fastened. [LRAPA 44-240(3), Table 5(v)]
- 22.f. The filling of storage tanks at the facility must be limited to unloading by vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 must be carried on the cargo tank. [LRAPA 44-240(3), Table 5(vi)]
- 23. The permittee a with gasoline storage tank equipped with a vapor balance system must comply with the following requirements: [LRAPA 44-240(4)]
 - 23.a. When loading a gasoline storage tank equipped with a vapor balance system, connect and ensure the proper operation of the vapor balance system whenever gasoline is being loaded. [LRAPA 44-240(4)(a)]
 - 23.b. Maintain all equipment associated with the vapor balance system to be vapor tight and in good working order. [LRAPA 44-240(4)(b)]
 - 23.c. Have the vapor balance equipment inspected on at least an annual basis to discover potential or actual equipment failures. [LRAPA 44-240(4)(c)]
 - 23.d. Replace, repair, or modify any worn or ineffective component or design element within 24 hours of discovery to ensure the vapor-tight integrity and efficiency of the vapor balance system. If repair parts must be ordered, either a written or verbal order for those parts must be initiated within two (2) working days or detecting such a leak. Such repair parts must be installed within 5 working days after receipt. [LRAPA 44-240(4)(d)]
- 24. The permittee subject to Condition 21 must comply with the following requirements: [LRAPA 44-240(5)]
 - 24.a. The applicable testing requirements in Conditions 25 through 29. [LRAPA 44-240(5)(a)]
 - 24.b. The applicable notification requirements of LRAPA 44-260. [LRAPA 44-240(5)(b)]
 - 24.c. The applicable recordkeeping and reporting requirements in Conditions 31 through 34 and 36 through 39. [LRAPA 44-240(5)(c)]
 - 24.d. The permittee must have records available within 24 hours of a request by the LRAPA or the EPA Administrator to document gasoline throughput. [LRAPA 44-240(5)(d)]

Testing and Monitoring

- 25. For all testing required by Condition 26, the permittee must submit notification to LRAPA at least ten (10) days prior to testing. [LRAPA 44-250(1)]
- 26. The permittee must comply with the testing requirements in Conditions 26.a and 26.b at the time of installation of a vapor balance system or a new gasoline storage tank. Further, the permittee with a monthly throughput of 100,000 gallons of gasoline or more must test every three (3) years. [LRAPA 44-250(2)]
 - 26.a. The permittee must demonstrate compliance with the leak rate and cracking pressure requirements, as specified in Condition 21.a.vii, for pressure/vacuum vent valves installed on gasoline storage tanks using test method identified in Conditions 26.a.i or 26.a.ii: [LRAPA 44-250(2)(a)]

- 26.a.i. PV (pressure/vacuum test valve) Vent Cap Testing in accordance with CARB TP–201.1E – Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see 40 CFR 63.14). [LRAPA 44-250(2)(a)(i)]
- 26.a.ii. Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f). [LRAPA 44-250(2)(a)(ii)]
- 26.b. The permittee must demonstrate compliance with the static pressure performance requirement, specified in Condition 21.a.viii, for the vapor balance system by conducting a static pressure test on the gasoline storage tanks using test methods identified in Conditions 26.b.i or 26.b.ii. [LRAPA 44-250(2)(b)]
 - 26.b.i. Pressure Decay Testing in accordance with CARB TP–201.3 – Determination of 2 inches of WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities. [LRAPA 44-250(b)(A)]
 - 26.b.ii. Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f). [LRAPA 44-250(b)(B)]
 - 26.b.iii. Bay Area Air Quality Management District Source Test Procedure ST-30 – Static Pressure Integrity Test – Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, see 40 CFR 63.14). [LRAPA 44-250(b)(C)]
- 27. The permittee, choosing, under the provisions of 40 CFR 63.6(g), to use a vapor balance system other than that described in Condition 21, must demonstrate to the EPA the equivalency of the permittee’s vapor balance system to that described in Condition 21 using the procedures specified in Conditions 27.a through 27.c. [LRAPA 44-250(3)]
 - 27.a. The permittee must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction in accordance with CARB TP–201.1E Vapor Recovery Test Procedure – Volumetric Efficiency for Phase I Vapor Recovery Systems, incorporated by reference, see 40 CFR 63.14. [LRAPA 44-250(3)(a)]
 - 27.b. The permittee must, during the initial performance test required in Condition 27.a, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in Condition 21.a.vii and for the static pressure performance requirement in Condition 21.a.viii. [LRAPA 44-250(3)(b)]
 - 27.c. The permittee must also comply with the testing requirements specified in Condition 26. [LRAPA 44-250(3)(c)]
- 28. The permittee must conduct performance tests under such conditions as LRAPA and the EPA Administrator specifies to the permittee based on representative performance, i.e., performance based on normal operation conditions, of the affected source. Upon request by LRAPA and the EPA Administrator, the permittee must make available such records as may be necessary to determine the conditions of performance tests. [LRAPA 44-250(4)]
- 29. The permittee must confirm that the owners and operators of gasoline cargo tanks subject to Condition 21 have conducted their required annual certification testing according to the vapor tightness testing requirements found in 40 CFR 63.11092(f) (See 40 CFR part 60 subpart BBBBBB Attachment). [LRAPA 44-250(5)]

Recordkeeping Requirements

30. The permittee must keep records for each consecutive 12 calendar month period and annual PSEL calculation. [LRAPA 34-016(1)]
31. The permittee must keep the following records: [LRAPA 44-270(1)]
 - 31.a. Records of all tests performed in accordance with Conditions 26 and 27. [LRAPA 44-270(1)(a)]
 - 31.b. Records related to the operation and maintenance of vapor balance equipment required in Conditions 21 through 24. Any vapor balance component defect must be logged and tracked by the permittee using forms provided by LRAPA or a reasonable facsimile. [LRAPA 44-270(1)(b)]
 - 31.c. Records of total monthly and annual throughput in gallons as defined. [LRAPA 44-270(1)(c)]
 - 31.d. Records of permanent changes made at the GDF and to vapor balance equipment which may affect emissions. [LRAPA 44-270(1)(d)]
32. The permittee must keep records required by Condition 31 for a period of five (5) years and must be available within 24 hours of a request by LRAPA and the EPA Administrator. [LRAPA 44-270(2)]
33. Each owner or operator of a gasoline cargo tank subject to the management practices of Condition 22 must keep records documenting vapor tightness testing for a period of five (5) years. Documentation must include each of the items specified in 40 CFR 63.11094(b)(2)(i) through (viii) (See 40 CFR part 60 subpart BBBBBB Attachment). Records of vapor tightness testing must be retained as specified in either Conditions 33.a or 33.b. [LRAPA 44-270(3)]
 - 33.a. The owner or operator of a gasoline cargo tank must keep all vapor tightness testing records with the cargo tank. [LRAPA 44-270(3)(a)]
 - 33.b. As an alternative to keeping all records with the cargo tank, the owner or operator of a gasoline cargo tank may comply with the requirements of Conditions 33.b.i and 33.b.ii. [LRAPA 44-270(3)(b)]
 - 33.b.i. The owner or operator of a gasoline cargo tank may keep records of only the most recent vapor tightness test with the cargo tank and keep records for the previous four (4) years at their office or another central location. [LRAPA 44-270(3)(b)(A)]
 - 33.b.ii. Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (e.g., via e-mail or facsimile) to LRAPA and the EPA Administrator during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures. [LRAPA 44-270(3)(b)(B)]
34. The permittee must keep records as specified in Conditions 34.a and 34.b. [LRAPA 44-270(4)]
 - 34.a. Records of the occurrence and duration of each malfunction of operation, i.e., process equipment, or the air pollution control and monitoring equipment. [LRAPA 44-270(4)(a)]
 - 34.b. Records of actions taken during periods of malfunction to minimize emission in accordance with Condition 14, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner or operation. [LRAPA 44-270(4)(b)]

Reporting Requirements

35. By the **February 15th each year**, the permittee must demonstrate compliance with the VOC and Aggregate HAP PSELS by submitting the 12-consecutive calendar month period based on the product throughput for the reporting period. The facility will be presumed to be in compliance with the yearly VOC PSEL provided the total product throughput does not exceed 39,900,000 gallons during any 12-consecutive calendar month period. If the permittee exceeds the operational throughput thresholds stated in Condition 4, the permittee must demonstrate compliance with the yearly VOC PSEL on a monthly basis using the requirements in Condition 5. [LRAPA 34-016]
36. The permittee must report to the LRAPA and the EPA Administrator the results of all tests required in Conditions 25 through 29. Test results must be submitted within 30 days of the completion of the performance testing. [LRAPA 44-280(1)]
37. The permittee that has a monthly throughput of 10,000 gallons of gasoline or more must report, by **February 15th of each year**, the following information, as applicable. [LRAPA 44-280(2)]
 - 37.a. The total throughput volume of gasoline, in gallons, for each calendar month. [LRAPA 44-280(2)(a)]
 - 37.b. A summary of changes made at the facility on vapor recovery equipment which may affect emissions. [LRAPA 44-280(2)(b)]
 - 37.c. List of all major maintenance performed on pollution control devices. [LRAPA 44-280(2)(c)]
 - 37.d. The number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. [LRAPA 44-280(2)(d)]
 - 37.e. A description of actions taken by the permittee during a malfunction to minimize emissions in accordance with Condition 14, including actions taken to correct the malfunction. [LRAPA 44-280(2)(e)]
38. The permittee must also submit with the annual report any information required by General Permit Conditions G15. [LRAPA 34-016]
39. Unless otherwise specified, all reports, notifications, etc., required by the above terms and conditions must be reported to the following office: [LRAPA 34-016]

Lane Regional Air Protection Agency
1010 Main Street
Springfield, Oregon 97477
(541) 736-1056

Outdoor Burning

40. Outdoor burning is prohibited in accordance with the requirements of LRAPA 47-020.

Fee Schedule

41. In accordance with adopted regulations, the permittee will be invoiced for the annual permit fees on **October 1st**, with fees due on **December 1st** of each year. [LRAPA 37-8020 Table 2]

BE/RR
12/19/2022

ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

ACDP	Air Contaminant Discharge Permit	NA	Not applicable
Annual Throughput	Amount of gasoline transferred into a gasoline dispensing facility during 12 consecutive months.	NESHAP	National Emissions Standards for Hazardous Air Pollutants
ASTM	American Society for Testing and Materials	NSR	New Source Review
AQMA	Air Quality Maintenance Area	O ₂	Oxygen
Bbl	Barrel (42 gallons)	OAR	Oregon Administrative Rules
CARB	California Air Resource Board	ORS	Oregon Revised Statutes
Calendar year	The 12-month period beginning January 1 st and ending December 31 st	O&M	Operation and Maintenance
CFR	Code of Federal Regulation	PCD	Pollution Control Device
DEQ	Oregon Department of Environmental Quality	ppm	Part per million
dscf	Dry Standard Cubic Foot	ppmv	Part per million by volume
EF	Emission Factor	PSD	Prevention of Significant Deterioration
EPA	US Environmental Protection Agency	PSEL	Plant Site Emission Limit
FCAA	Federal Clean Air Act	PTE	Potential to Emit
Gal	gallons	PV	Pressure/Vacuum
GDF	Gasoline Dispensing Facility	scf	Standard Cubic Foot
HAP	Hazardous Air Pollutant as defined by Section LRAPA 44-0020	SER	Significant Emission Rate
ID	Identification number	SERP	Source Emission Reduction Plan
I&M	Inspection and Maintenance	SIC	Standard Industrial Code
kgal	1,000 gallons	TP	Throughput
lb	Pounds	VE	Visible Emissions
lb/kgal	Pounds per 1,000 gallons	VOC	Volatile Organic Compound
LRAPA	Lane Regional Air Protection Agency	Year	A period consisting of any 12-consecutive calendar months

GENERAL PERMIT CONDITIONS

General Conditions and Disclaimers

- G1. A copy of the permit application and this Air Contaminant Discharge Permit (ACDP) must be available on site for inspection upon request. [LRAPA 37-0020(3)]
- G2. The permittee must allow the Director or his/her authorized representatives access to the plant site and pertinent records at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant discharge records and otherwise conducting necessary functions related to this permit in accordance with ORS 468.095. [LRAPA 13-020(1)(h)]
- G3. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

Performance Standards and Emission Limits

- G4. The permittee must not cause or permit the deposition of any particulate matter which is larger than 250 microns in size at sufficient duration and quantity, as to create an observable deposition upon the real property of another person. [LRAPA 32-055]
- G5. The permittee must not discharge from any source whatsoever such quantities of air contamination which cause injury or damage to any persons, the public, business or property. Such determination to be made by LRAPA. [LRAPA 32-090(1)]
- G6. The permittee must not cause or permit emission of water vapor if the water vapor causes or tends to cause detriment to the health, safety or welfare of any person or causes, or tends to cause damage to property or business. [LRAPA 32-090(2)]
- G7. The permittee must not willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminants emitted, conceals emissions of air contaminants which would otherwise violate LRAPA rules. [LRAPA 32-050(1)]
- G8. The permittee must not cause or permit the installation or use of any device or use of any means designed to mask the emissions of an air contaminant which causes or tends to cause detriment to health, safety or welfare of any person. [LRAPA 32-050(2)]
- G9. The permittee must not allow any materials to be handled, transported, or stored; or a building, its appurtenances or road(s) to be used, constructed, altered, repaired, or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from being airborne. [LRAPA 48-015(1)]
- G10. The permittee may not cause or allow air contaminants from any source subject to regulation by LRAPA to cause nuisance. [LRAPA 49-010(1)]

Excess Emissions: General Policy

- G11. Emissions of air contaminants in excess of applicable standards or permit conditions are unauthorized and are subject to enforcement action, pursuant to LRAPA 36-010 and 36-030. These rules apply to any permittee operating a source which emits air contaminants in violation of any applicable air quality rule or permit condition, including but not limited to excess emissions

resulting from the breakdown of air pollution control devices or operating equipment, process upset, startup, shutdown, or scheduled maintenance. Sources that do not emit air contaminants in excess of any applicable rule or permit condition are not subject to the recordkeeping and reporting requirements in LRAPA Title 36. Emissions in excess of applicable standards are not excess emissions if the standard is in an NSPS or NESHAP and the NSPS or NESHAP exempts startups, shutdowns and malfunctions as defined in the applicable NSPS or NESHAP. [LRAPA 36-001(1)]

Excess Emissions: Notification and Record-keeping

- G12. For all other excess emissions not addressed in LRAPA Sections 36-010, 36-015, or 36-040, the following requirements apply: [LRAPA 36-020(1)]
- a. The owner or operator, of a small source, as defined by LRAPA 36-005(7), need not notify LRAPA of excess emissions events immediately unless otherwise required by permit condition, written notice by LRAPA, or if the excess emission is of a nature that could endanger public health.
 - b. Notification must be made to the LRAPA office. The current LRAPA telephone number during regular business hours (8 a.m. - 5 p.m., M-F) is (541) 736-1056. During nonbusiness hours, weekends, or holidays, the permittee must immediately notify LRAPA by calling the LRAPA Upset/Complaint Line. The current number is (541) 726-1930.
 - c. Follow-up reporting, if required by LRAPA, must contain all information required by Condition G15.
- G13. At each annual reporting period specified in this permit, or sooner if required by LRAPA, the permittee must submit a copy of the upset log entries for the reporting period, as required by Condition G15. [LRAPA 36-025(4)(a)]
- G14. Any excess emissions which could endanger public health or safety must immediately be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311.
- G15. The permittee must keep an upset log of all planned and unplanned excess emissions. The upset log must include the following: [LRAPA 36-025(3) and 36-030(1)]
- a. date and time each event was reported to LRAPA;
 - b. whether the process handling equipment and the air pollution control equipment were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - c. whether repairs or corrections were made in an expeditious manner when the permittee knew or should have known that emission limits were being or were likely to be exceeded;
 - d. whether the event was one in a recurring pattern of incidents which indicate inadequate design, operation, or maintenance; and
 - e. final resolution of the cause of the excess emissions.

Upset logs must be kept by the permittee for five (5) calendar years. [LRAPA 36-025(3)]

Excess Emissions: Scheduled Maintenance

- G16. If the permittee anticipates that scheduled maintenance of air contaminant sources or air pollution control devices may result in excess emissions, the permittee must obtain prior LRAPA

authorization of procedures that will be used to minimize excess emissions. Application for approval of procedures associated with the scheduled maintenance must be submitted and received by LRAPA in writing at least seventy-two (72) hours prior to the event. The application must include the following: [LRAPA 36-015(1)]

- a. reasons explaining the need for maintenance, including but not limited to: why the maintenance activity is necessary; why it would be impractical to shut down the source operation during the maintenance activity; if applicable, why air pollution control devices must be by-passed or operated at reduced efficiency during the maintenance activity; and why the excess emissions could not be avoided through better scheduling for maintenance or through better operation and maintenance practices;
- b. identification of the specific production or emission control device or system to be maintained;
- c. identification of the nature of the air contaminants likely to be emitted during the maintenance period, and the estimated amount and duration of the excess emissions, including measures such as the use of overtime labor and contract services and equipment that will be taken to minimize the length of the maintenance period; and
- d. identification of specific procedures to be followed which will minimize excess emissions at all times during the scheduled maintenance.

G17. No scheduled maintenance associated with the approved procedures in Condition G16 that is likely to result in excess emissions may occur during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced yellow or red woodstove advisory period, in areas determined by LRAPA as PM_{2.5} or PM₁₀ nonattainment areas. [LRAPA 36-015(6)]

G18. In cases where LRAPA has not received notification of scheduled maintenance that is likely to cause excess emissions within the required seventy-two (72) hours prior to the event, or where such approval has not been waived pursuant to LRAPA 36-015(3), the permittee must immediately notify LRAPA by telephone of the situation, and must be subject to the requirements of Conditions G12 and G13. [LRAPA 36-015(7)]

Air Pollution Emergencies

G19. The permittee must, upon declaration of an air pollution alert, air pollution warning, or air pollution emergency, take all emission reduction measures specified in Tables 1, 2, and 3 of LRAPA Title 51 (included in Attachment A of this permit). Permittees responsible for a source of air contamination within a Priority I AQCR must, upon declaration of an episode condition affecting the locality of the air contamination source, take all appropriate actions specified in the applicable table and must take all appropriate actions specified in an LRAPA-approved preplanned abatement strategy for such condition which has been submitted and is on file with LRAPA. [LRAPA 51-015]

Notification of Construction/Modification

G20. The permittee must notify LRAPA in writing using an LRAPA "Notice of Intent to Construct" form, or other permit application forms and obtain approval in accordance with LRAPA 34-010 and 34-034 through 34-038 before:

- a. constructing, installing or establishing a new stationary source that will cause an increase in regulated pollutant emissions
- b. making any physical change or change in the operation of an existing stationary source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions; or

- c. constructing or modifying any pollution control equipment.

Notification of Name Change

- G21. The permittee must notify LRAPA in writing, using an LRAPA Application for Administrative Amendment to ACDP form, within 60 days after legal change of the registered name of the company with the Corporation Division of the State of Oregon. [LRAPA 37-0030(4)]

Applicable administrative fees must be submitted with an application for the name change.

Permit Renewal

- G22. Application for renewal of this permit must be submitted not less than 120 days prior to the permit expiration date for Simple ACDPs, and 180 days prior to the permit expiration date for Standard ACDP. [LRAPA 37-0040(2)(b)]

- G23. A source may not be operated after the expiration date of a permit, unless any of the following occur prior to the expiration date of the permit: [LRAPA 37-0082(1)(a)]

- a. A timely and complete application for renewal or for an LRAPA Title V Operating Permit has been submitted; or
- b. Another type of permit, ACDP or Title V, has been issued authorizing operation of the source.

- G24. For a source operating under an ACDP or LRAPA Title V Operating Permit, a requirement established in an earlier ACDP remains in effect notwithstanding expiration of the ACDP, unless the provision expires by its terms or unless the provision is modified or terminated according to the procedures used to establish the requirement initially. [LRAPA 37-0082(1)(c)]

- G25. Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. [LRAPA 37-0040(4)]

Termination Conditions

- G26. This permit will be automatically terminated upon: [LRAPA 37-0082(2)]

- a. Issuance of a renewal or new ACDP for the same activity or operation;
- b. Written request of the permittee, if LRAPA determines that a permit is no longer required;
- c. Failure to submit a timely application for permit renewal. Termination is effective on the permit expiration date; or;
- d. Failure to pay annual fees within 90 days of invoice by LRAPA, unless prior arrangements for payment have been approved in writing by LRAPA.

- G27. If LRAPA determines that a permittee is in noncompliance with the terms of the permit, submitted false information in the application or other required documentation, or is in violation of any applicable rule or statute, LRAPA may revoke the permit. LRAPA will provide notice of the intent to revoke the permit to the permittee under LRAPA Title 31. The notice will include the reasons why the permit will be revoked, and include an opportunity for the permittee to request a contested case hearing prior to the revocation. A written request for hearing must be received by LRAPA within 60 days from service of the notice on the permittee, and must state the grounds of the request. The hearing will be conducted as a contested case hearing under ORS 183.413 through 183.470 and

LRAPA Title 14. The permit will continue in effect until the 60th day after service of the notice on the permittee, if the permittee does not timely request a hearing, or until a final order is issued if the permittee timely requests a hearing. [LRAPA 37-0082(4)(a)]

G28. A permit automatically terminated under LRAPA 37-0082(2)(b) through (2)(d) may only be reinstated by the permittee by applying for a new permit. The permittee must also pay the applicable new source permit application fees in this title unless the owner or operator submits the renewal application within three months of the permit expiration date. [LRAPA 37-0082(3)]

G29. If LRAPA finds there is a serious danger to the public health, safety or the environment caused by a permittee's activities, LRAPA may immediately revoke or refuse to renew the permit without prior notice or opportunity for a hearing. If no advance notice is provided, notification will be provided to the permittee as soon as possible as provided under LRAPA Title 31. The notification will set forth the specific reasons for the revocation or refusal to renew and will provide an opportunity for the permittee to request a contested case hearing for review of the revocation or refusal to renew. A permittee's written request for hearing must be received by LRAPA within 90 days of service of the notice on the permittee and must state the grounds for the request. The hearing will be conducted as a contested case hearing under ORS 183.413 through 183.470 and LRAPA Title 14. The revocation or refusal to renew becomes final without further action by LRAPA if a request for a hearing is not received within the 90 days. If a request for a hearing is timely received, the revocation or refusal to renew will remain in place until issuance of a final order. [LRAPA 37-0082(4)(b)]

G30. Any hearing requested must be conducted pursuant to the rules of LRAPA. [LRAPA Title 14]

Asbestos

G31. The permittee must comply with the asbestos abatement requirements in LRAPA Title 43 for all activities involving asbestos-containing materials, including, but not limit to, demolition, renovation, repair, construction, and maintenance. [LRAPA Title 43]

[Revised 1/19/18]

40 CFR PART 60 SUBPART BBBB ATTACHMENT

40 CFR 63.11092(f)

(f) The annual certification test for gasoline cargo tanks shall consist of the test methods specified in paragraphs (f)(1) or (f)(2) of this section. Affected facilities that are subject to subpart XX of 40 CFR part 60 may elect, after notification to the subpart XX delegated authority, to comply with paragraphs (f)(1) and (2) of this section.

(1) *EPA Method 27, Appendix A-8, 40 CFR part 60.* Conduct the test using a time period (t) for the pressure and vacuum tests of 5 minutes. The initial pressure (P_i) for the pressure test shall be 460 millimeters (mm) of water (18 inches of water), gauge. The initial vacuum (V_i) for the vacuum test shall be 150 mm of water (6 inches of water), gauge. The maximum allowable pressure and vacuum changes (Δp , Δv) for all affected gasoline cargo tanks is 3 inches of water, or less, in 5 minutes.

40 CFR 63.11094(b)(2)(i) through (viii)

(2) The documentation file shall be kept up-to-date for each gasoline cargo tank loading at the facility. The documentation for each test shall include, as a minimum, the following information:

(i) *Name of test:* Annual Certification Test—Method 27 or Periodic Railcar Bubble Leak Test Procedure.

(ii) Cargo tank owner's name and address.

(iii) Cargo tank identification number.

(iv) Test location and date.

(v) Tester name and signature.

(vi) *Witnessing inspector, if any:* Name, signature, and affiliation.

(vii) *Vapor tightness repair:* Nature of repair work and when performed in relation to vapor tightness testing.

(viii) *Test results:* Test pressure; pressure or vacuum change, mm of water; time period of test; number of leaks found with instrument; and leak definition.

ATTACHMENT A: Air Pollution Emergencies

Table I

AIR POLLUTION EPISODE: **ALERT CONDITION**

EMISSION REDUCTION PLAN

Part A: Pollution Episode Conditions for Carbon Monoxide or Ozone

For **Alert Conditions** due to excessive levels of carbon monoxide or ozone, persons operating motor vehicles shall be requested to voluntarily curtail or eliminate all unnecessary operations within the designated **Alert Area**, and public transportation systems shall be requested to provide additional services in accordance with a preplanned strategy.

Part B: Pollution Episode Conditions for Particulate Matter

For **Alert Conditions** resulting from excessive levels of particulate matter, the following measures shall be taken in the designated area:

1. There shall be no open burning by any person of any material.
2. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.
1. 3. Persons responsible for the operation of any source of air contaminants listed below shall take all required actions for the **Alert Level**, in accordance with the preplanned strategy:

Source of Contamination	Control Actions — Alert Level
A. Coal, oil, or wood-fired facilities.	1) Utilization of electric generating fuels having low ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Diverting electric power generation to facilities outside of Alert Area .
B. Coal, oil, or wood-fired process steam generating facilities.	1) Utilization of fuel having low ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

Source of Contamination	Control Actions — <i>Alert Level</i>
	3) Substantial reduction of steam load demands consistent with continuing plant operations.
C. Manufacturing industries of the following classifications: - Primary Metals Industries - Petroleum Refining - Chemical Industries - Mineral Processing Indus. - Grain Industries - Paper and Allied Products - Wood Processing Industry	1) Reduction of air contaminants from manufacturing operations by curtailing postponing, or deferring production and all operations. 2) Reduction by deferring trade waste disposal operations which emit solid particle gas vapors or malodorous substance. 3) Reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

Table II

AIR POLLUTION EPISODE: **WARNING CONDITIONS**

EMISSION REDUCTION PLAN

Part A: Pollution Episode Conditions for Carbon Monoxide or Ozone

For **Warning Conditions**, resulting from excessive levels of carbon monoxide or ozone, the following measures shall be taken:

1. Operation of motor vehicles carrying fewer than three (3) persons shall be prohibited within designated areas during specified hours. Exceptions from this provision are:
 - A. Public transportation and emergency vehicles
 - B. Commercial vehicles
 - C. Through traffic remaining on Interstate or primary highways.
2. At the discretion of the Agency, operations of all private vehicles within designated areas or entry of vehicles into designated areas may be prohibited for specified periods of time.
3. Public transportation operators shall, in accordance with a pre-planned strategy, provide the maximum possible additional service to minimize the public's inconvenience as a result of No. 1 or No. 2. above.
4. For ozone episodes the following additional measures shall be taken:
 - A. No bulk transfer of gasoline without vapor recovery from 2:00 a.m. to 2:00 p.m.
 - B. No service station pumping of gasoline from 2:00 a.m. to 2:00 p.m.

- C. No operation of paper coating plants from 2:00 a.m. to 2:00 p.m.
 - D. No architectural painting or auto finishing;
 - E. No venting of dry-cleaning solvents from 2:00 a.m. to 2:00 p.m. (except perchloroethylene).
5. Where appropriate for carbon monoxide episodes during the heating season, and where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces for domestic space heating, except where such devices provide the sole source of heat.

Part B: Pollution Episode Conditions for Particulate Matter

For **Warning Conditions** resulting from excessive levels of particulate matter, the following measures shall be taken:

1. There shall be no open burning by any person of any material.
2. The use of incinerators for the disposal of solid or liquid wastes shall be prohibited.
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.
4. Where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces for domestic space heating, except where such devices provide the sole source of heat.
5. Persons responsible for the operation of any source of air contaminants listed below shall take all required actions for the **Warning Level**, in accordance with a preplanned strategy:

Source of Contamination	Control Actions — Warning Level
A. Coal, oil, or wood-fired electric power generating facilities.	<ol style="list-style-type: none"> 1) Maximum utilization of fuels having lowest ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Diverting electric power generation to facilities outside of Warning Area. 4) Prepare to use a plan of action if an Emergency Condition develops. 5) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.

Source of Contamination	Control Actions — <i>Warning Level</i>
<p>B. Coal, oil, or wood-fired process steam generating facilities.</p>	<ol style="list-style-type: none"> 1) Maximum utilization of fuels having the lowest ash and sulfur content. 2) Utilization of mid-day (12: 00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Prepare to use a plan of action if an Emergency Condition develops. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
<p>C. Manufacturing industries which require considerable lead time for shut-down including the following classifications:</p> <ul style="list-style-type: none"> - Petroleum Refining - Chemical Industries - Primary Metals Industries - Glass Industries - Paper and Allied Products 	<ol style="list-style-type: none"> 1) Reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations. 2) Reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances. 3) Maximum reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence of boiler lancing or soot blowing.
<p>D. Manufacturing industries which require relatively short time for shut-down.</p>	<ol style="list-style-type: none"> 1) Elimination of air contaminants from manufacturing operations by ceasing, allied operations to the extent possible without causing injury to persons or damage to equipment. 2) Elimination of air contaminants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances. 3) Reduction of heat load demands for processing. 4) Utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

Table III

AIR POLLUTION EPISODE: **EMERGENCY CONDITIONS**

EMISSION REDUCTION PLAN

1. There shall be no open burning by any person of any material.
2. The use of incinerators for the disposal of solid or liquid wastes shall be prohibited.
3. All places of employment, commerce, trade, public gatherings, government, industry, business, or manufacture shall immediately cease operation, except the following:
 - A. Police, fire, medical and other emergency services;
 - B. Utility and communication services;
 - C. Governmental functions necessary for civil control and safety;
 - D. Operations necessary to prevent injury to persons or serious damage to equipment or property;
 - E. Food stores, drug stores and operations necessary for their supply;
 - F. Operations necessary for evacuation of persons leaving the area;
 - G. Operations conducted in accordance with an approved preplanned emission reduction plan on file with the Agency.
4. All commercial and manufacturing establishments not included in these rules shall institute such actions as will result in maximum reduction of air contaminants from their operations which emit air contaminants, to the extent possible without causing injury or damage to equipment.
5. The use of motor vehicles is prohibited except for the exempted functions in 3, above.
6. Airports shall be closed to all except emergency air traffic.
7. Where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces.
8. Any person responsible for the operation of a source of atmospheric contamination listed below shall take all required control actions for this **Emergency Level**.

Source of Contamination	Control Actions — Emergency Level
A. Coal, oil, or wood-fired electric power generating facilities.	1) Maximum utilization of fuels having lowest ash and sulfur content.
	2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

Source of Contamination	Control Actions — <i>Emergency Level</i>
	3) Diverting electric power generation to facilities outside of Emergency area. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
B. Coal, oil, or wood-fired steam generating facilities.	1) Reducing heat and steam process demands to absolute necessities consistent with preventing equipment damage. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Taking the action called for in the emergency plan. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
C. Manufacturing industries of the following classifications: - Primary Metals Industry - Petroleum Refining Operations - Chemical Industries - Mineral Processing Industries - Paper and Allied Products - Grain Industry - Wood Processing Industry	1) The elimination of air of contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment. 2) Elimination of air contaminants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances. 3) Maximum reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.