LANE REGIONAL AIR PROTECTION AGENCY
TITLE V OPERATING PERMIT REVIEW REPORT

1010 Main Street
Springfield, OR 97477

Source Information:

SIC	2051
NAICS	311812

Source Categories (Title 37, Table 1: Part and code)	B – 8
Public Notice Category	III

Compliance and Emissions Monitoring Requirements:

Unassigned emissions	NA
Emission credits	NA
Compliance schedule	NA
Source test [date(s)]	See Permit

COMS	NA
CEMS	NA
Ambient monitoring	NA

Reporting Requirements

Annual report (due date)	February 15
Emission fee report (due date)	February 15
SACC (due date)	July 30
Quarterly report (due dates)	NA

Monthly report (due dates)	NA
Excess emissions report	Immediately
Other reports	Semi-annual

Air Programs

NSPS (list subparts)	NA
NESHAP (list subparts)	A, CCCCCC, ZZZZ
CAM	NA
Regional Haze (RH)	NA
Synthetic Minor (SM)	NA
Part 68 Risk Management	NA
Title V	Yes

ACDP (SIP)	Yes
Major HAP source	No
Federal major source	NA
New Source Review (NSR)	NA
Prevention of Significant Deterioration (PSD)	NA
Acid Rain	NA
Clean Air Mercury Rule (CAMR)	NA

LANE REGIONAL AIR PROTECTION AGENCY
TITLE V OPERATING PERMIT REVIEW REPORT

United State Bakeries dba Franz Family Bakeries
2000 Nugget Way
Springfield, Oregon 97403

TABLE OF CONTENTS

LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS REVIEW REPORT

ACDP	Air Contaminant Discharge Permit
AQMA	Air Quality Management Area
Act	Federal Clean Air Act
ASTM	American Society of Testing and Materials
Btu	British thermal unit
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CI	Compression Ignition
CMS	Continuous Monitoring System
CO	Carbon Monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
COMS	Continuous Opacity Monitoring System
CPDS	Certified Product Data Sheet
CPMS	Continuous parameter monitoring system
DEQ	Department of Environmental Quality
dscf	Dry standard cubic feet
EF	Emission factor
EPA	US Environmental Protection Agency
EU	Emissions Unit
FCAA	Federal Clean Air Act
ft^2	Square foot
FSA	Fuel sampling and analysis
GHG	Greenhouse Gas
gr/dscf	Grain per dry standard cubic feet (1 pound = 7000 grains)
HAP	Hazardous Air Pollutant as defined by LRAPA Title 12
HCFC	Halogenated Chloro-Fluoro-Carbons
ID	Identification number or label
I&M	Inspection and maintenance
LRAPA	Lane Regional Air Protection Agency
MACT	Maximum Achievable Control Technology
MM	Million
MMBtu	Million British thermal units
NA	Not applicable
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
O_2	Oxygen
OAR	Oregon Administrative Rules
ODEQ	Oregon Department of Environmental Quality
ORS	Oregon Revised Statutes
O&M	Operation and maintenance
Pb	Lead
PCD	Pollution Control Device
PM	Particulate matter
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PM_{10}	Particulate matter less than 10 microns in size
ppm	Parts per million
PSEL	Plant Site Emission Limit
psia	pounds per square inch, actual
PTE	Potential to Emit
RICE	Reciprocating Internal Combustion Engine
SACC	Semi-Annual Compliance Certification
SCEMP	Surrogate Compliance Emissions Monitoring Parameter
Scf	Standard cubic foot
SER	Significant emission rate
SERP	Source emissions reduction plan
SI	Spark Ignition
SIC	Standard Industrial Code
SIP	State Implementation Plan
SO_2	Sulfur dioxide
ST	Source test
TACT	Typically Achievable Control Technology
VE	Visible emissions
VMT	Vehicle miles traveled
VOC	Volatile organic compounds
VHAP	Volatile hazardous air pollutant
Year	A period consisting of any 12 consecutive calendar months

INTRODUCTION

1. This is an existing facility applying for a renewal of its existing Title V federal operating permit issued on June 15, 2011. The existing operating permit expired on June 15, 2016. Franz Bakery submitted a timely renewal application on May 5, 2015. The facility has been operating under the application shield authorized by 340-218-0130(2) since the timely renewal application was submitted.

2. In accordance with OAR 340-218-0120(1)(f), this review report is intended to provide the legal and factual basis for the draft permit conditions. In most cases, the legal basis for a permit condition is included in the permit by citing the applicable regulation. In addition, the factual basis for the requirement may be the same as the legal basis. However, when the regulation is not specific and only provides general requirements, this review report is used to provide a more thorough explanation of the factual basis for the draft permit conditions.

PERMITTEE IDENTIFICATION

3. United States Bakeries doing business as Franz Bakery (Franz Bakery or "the facility") owns and operates a commercial bakery under the primary SIC code 2051 and is located at 2000 Nugget Way, Springfield, Oregon.

FACILITY DESCRIPTION

4. Franz Bakery is a commercial bakery whose products are bread, rolls, buns and croutons. The facility is located in a small industrial park. To the north is a residential area. To the east is a mixed commercial and residential area and the Willamette River. To the south is a light industrial area and Interstate 5. To the west is a light industrial area. While the terrain is generally flat immediately surrounding the facility, elevations are significantly higher to the south and southwest of the facility.

5. Franz Bakery began operation prior to 1978. Previously, the facility operated at 1760 East 13th Avenue, Eugene, Oregon. In February 2005, the facility relocated to 2000 Nugget Way, Springfield, Oregon. As the move was considered to be in the same air basin, LRAPA authorized the facility to retain their netting basis and baseline emissions at the new location under LRAPA 42-0046(5) as discussed in the review report for the Standard ACDP issued on 09/03/2010.

6. Franz Bakery is a Title V major source because potential VOC emissions exceed 100 tons of VOC per year. However, because bakeries are not a listed source category and the potential emissions of all criteria pollutants are less than 250 tons per year, the facility is not a federal major source for PSD. The facility is also an area source of federal HAPs

7. The facility is located inside the Eugene Springfield Air Quality Management Area. The facility is located in an area that has been designated an attainment area for PM, $PM_{2.5}$, VOC, NOx, SO_2 and a maintenance area for CO and PM_{10}.

8. LRAPA has reviewed and issued the following permitting actions to this facility:

Date Approved	Permit Action Type	Description
12/19/1995	Synthetic Minor ACDP	Bakery ovens and material handling
02/14/2000	Synthetic Minor ACDP	2 Boilers, 4 Ovens and Bakery Operations
04/06/2001	Synthetic Minor ACDP	Bakery products and NG combustion
09/03/2010	Standard ACDP	Bun line, bread line, silos and GDF at new location
06/15/2011	Initial Title V permit	Total facility operation permit

Date Approved	Permit Action Type	Description
04/17/2018	Administrative Amendment #1 – Minor Modification	Add new 7.1 MMBtu/hr Bread Oven, Process Line 3, and RCO EU-6 and six new bulk flour silos EU-1B.
11/16/2018	Approval to Construct NC-208922-A18	Add ingredient dump station controlled by a baghouse.
11/16/2018	Off Permit Change under OAR 340-218-0140	Add ingredient dump station controlled by a baghouse.

EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION

9. The sources or emissions units (EU) at this facility are the following:

EU ID	Emission Unit Description	Pollution Control Device Description	PCD ID
EU-1A	Seven (7) Bulk Flour Silos	Bin Vent Baghouses	BVB-1A
EU-1B	Six (6) Bulk Flour Silos	Bin Vent Baghouses	BVB-1B
EU-2	7.5 MMBtu/hr Thermal Oil System, natural gas fired	None	NA
EU-3	12 MMBtu/hr Bread Oven, Process Line 1	None	NA
EU-4	6.1 MMBtu/hr Bun Oven, Process Line 2	None	NA
EU-6	7.1 MMBtu/hr Bread Oven, Process Line 3	Regenerative Catalytic Oxidizer	RCO-6
AIE	Aggregate Insignificant Activities: • VOC from combustion • VOC from gasoline dispensing facility (GDF) • $PM/PM_{10}/PM_{2.5}$ from dump station	None Submerged Fill (GDF) Baghouse (Dump Station)	NA

9.a. The facility equipment is arranged in three (3) breadmaking process lines each equipped with a baking oven. The processes consist of mixing flour, water, sugar and yeast into a dough, allowing it to rise, followed by forming, baking, cooling and packaging of the product.

9.b. The use of yeast results in the emission of VOC. The yeast added to the bread dough predominately generates ethanol, a VOC, during the fermentation (rising) stages of breadmaking. This VOC is emitted from the baking ovens. The amount of VOC emitted is directly proportional to the production rate and product mix. One of the three breadmaking process lines exhausts to a Regenerative Catalytic Oxidizer (RCO) to control the VOC emissions.

9.c. Other emission sources at the facility include natural gas combustion in the baking ovens, oil heater and RCO. The RCO has a maximum heat input rating of 6.875 MMBtu/hr.

9.d. The facility has 13 flour storage silos. Six (6) of the storage silos were installed in 2018 as part of the construction of the new baking line. The particulate matter emissions from the flour storage silos are controlled by bin vent baghouses.

9.e. The facility also contains one dryer where bread is dried for croutons. This natural gas-fired device has a maximum heat input of 750,000 Btu/hr and is considered categorically insignificant. As categorically insignificant, there will be no further review of this emission unit.

9.f. The facility has three emission units included under Aggregated Insignificant Emissions as defined under LRAPA Title 12. The first emission unit is the VOC emissions resulting from natural gas combustion. The second emission unit is the VOC emissions resulting from the GDF. Annual actual emissions are estimated to be 0.29 tons per year of VOCs. The third emission unit is the $PM/PM_{10}/PM_{2.5}$ emissions resulting from an ingredient dump station controlled by a baghouse that exhausts to ambient air. Annual actual emissions are calculated to be 0.3 tons per year each of PM, PM_{10} and $PM_{2.5}$

10. Categorically insignificant activities include the following:

- Constituents of a chemical mixture present at less than 1% by weight of any chemical or compound regulated under OAR Chapter 340, Divisions 200 through 268, excluding Divisions 248 and 262, or less than 0.1% by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year
- Evaporative and tail pipe emissions from on-site motor vehicle operation;
- Distillate oil, gasoline, natural gas, or propane burning equipment, provided the aggregate expected actual emissions of the equipment identified as categorically insignificant do not exceed the de minimis level for any regulated pollutant, based on the expected maximum annual operation of the equipment. If a source's expected emissions from all such equipment exceed the de minimis levels, then the source may identify a subgroup of such equipment as categorically insignificant with the remainder not categorically insignificant. The following equipment may never be included as categorically insignificant;
    - Any individual distillate oil, kerosene or gasoline burning equipment with a rating greater than 0.4 million Btu/hour;
    - Any individual natural gas or propane burning equipment with a rating greater than 2.0 million Btu/hour.
- Distillate oil, kerosene, gasoline, natural gas or propane burning equipment brought on site for six months or less for maintenance, construction or similar purposes, such as but not limited to generators, pump, hat water pressure washers and space heaters, provided that any such equipment that performs the same function as the permanent equipment, must be operated within the source's existing PSEL;
- Office activities;
- Food service activities;
- Janitorial activities;
- Personal care activities;
- Groundskeeping activities including, but not limited to building painting and road and parking lot maintenance;
- Instrument calibration;
- Maintenance and repair shop;
- Automotive repair shops or storage garages;
- Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment;
- Refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems;
- Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities;
- Temporary construction activities;
- Warehouse activities;
- Accidental fires;
- Air vents from air compressors;
- Air purification systems;
- Demineralized water tanks;
- Electrical charging station;
- Fire brigade training;
- Instrument air dryers and distribution;
- Fire suppression;
- Blueprint making;

- Routine maintenance, repair, and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking;
- Electric motors;
- Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids;
- On-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles;
- Natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment;
- Pressurized tanks containing gaseous compounds;
- Vacuum sheet stacker vents;
- Emissions from wastewater discharges to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities
- Fire suppression and training;
- Paved roads and paved parking lots within an urban growth boundary;
- Hazardous air pollutant emissions of fugitive dust from paved and unpaved roads, except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils;
- Health, safety, and emergency response activities;
- Emergency generators and pumps used only during loss of primary equipment or utility service due to circumstances beyond the reasonable control of the owner or operator, or to address a power emergency, provided that the aggregate horsepower rating of all stationary emergency generator and pump engines is not more than 3,000 horsepower. If the aggregate horsepower rating of all stationary emergency generator and pump engines is more than 3,000 horsepower, then no emergency generators and pumps at the source may be considered categorically insignificant;
- Uncontrolled oil/water separators in effluent treatment systems, excluding systems with a throughput of more than 400,000 gallons per year of effluent located at petroleum refineries, sources that perform petroleum refining and re-refining of lubricating oils and greases including asphalt production by distillation and the reprocessing of oils and/or solvents for fuels; or bulk gasoline plants, bulk gasoline terminals, and pipeline facilities; and
- Combustion source flame safety purging on startup.

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING

Facility-Wide Requirement

11. The permit establishes 'reasonable precautions' to minimize fugitive dust for this facility. Compliance is demonstrated through a plant survey of visible emissions to be completed at least once a month using EPA Method 22. The permittee is required to take corrective action if any fugitive emissions are identified or to conduct a Modified EPA Method 9 test within 24 hours.

12. The permit limits the potential for creating a public nuisance from odors and large-size (fallout) particulate matter. Monitoring for these conditions is the maintenance of a complaint log and keeping records of complaint responses and resolutions in a timely manner.

EU-1A and EU-1B

13. These emission units are subject to the visible emission limitations under LRAPA 32-010(3). They may not have visible emissions equal to or greater than 20% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour. Compliance is demonstrated through a plant survey of visible emissions to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or to conduct a Modified EPA Method 9 test within 24 hours. In addition, each silo must be equipped with a dust collector that is maintained according to the manufacturer's instructions.

14. These emission units are subject to particulate matter emission limitations under LRAPA 32-015(2)(b). For sources installed, constructed or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are no representative compliance source tests, the particulate matter emission limit is 0.14 grains per dry standard cubic foot. The silos covered by EU-1A are subject to this particulate matter emission limit. For sources installed, constructed, or modified after April 16, 2015, the particulate matter emission limit is 0.10 grains per dry standard cubic foot. The silos covered by EU-1B are subject to this particulate matter emission limit. Compliance is demonstrated through a plant survey of visible emissions to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or to conduct a Modified EPA Method 9 test within 24 hours. In addition, each silo must be equipped with a dust collector that is maintained according to the manufacturer's instructions.

EU-2

15. This emission unit is subject to the visible emission limitations under LRAPA 32-010(3). It may not have visible emissions equal to or greater than 20% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour. Compliance is demonstrated through a plant survey of visible emissions to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or to conduct a Modified EPA Method 9 test within 24 hours. No significant visible emissions are expected from this source because it combusts only natural gas – a clean burning fuel.

16. This emission unit is subject to particulate matter emission limitations under LRAPA 32-015(2)(b). For sources installed, constructed or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are no representative compliance source tests, the particulate matter emission limit is 0.14 grains per dry standard cubic foot. Compliance is demonstrated through a plant survey of visible emissions to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or to conduct a Modified EPA Method 9 test within 24 hours. No significant particulate matter emissions are expected from this source because it combusts only natural gas – a clean burning fuel.

EU-3, EU-4 and EU-6

17. VOCs are the principle pollutant emitted from this facility and result from yeast-raised bread. VOC emissions are estimated based on an EPA empirical emission factor equation derived from testing data of commercial bakeries producing yeast-raised bread (US EPA AP-42, Section 9.9.6 and EPA 453/R-92-017, Dec. 1992). The permit requires the permittee to use this method to calculate its VOC emission for the bread-making operation. The calculation is:

$$\text{VOC emission factor (EF)} = 0.95Y_i + 0.195t_i - 0.51S - 0.86t_s + 1.90$$

where:
VOC EF is in pounds VOC per ton of baked bread (lb/ton);
Y_i = initial baker's percent of yeast;
t_i = total yeast action time in hours;
S = final (spike) baker's percent of yeast; and
t_s = spiking time in hours.

18. To demonstrate emission compliance, the facility must track each process parameter needed in the above equation per product type (ex. bread, buns, and rolls). Recordkeeping requires calculation of ongoing emissions on a daily, weekly, and annual basis for each bread type.

19. The VOC emissions from EU-6 are controlled by an RCO. In an RCO the incoming organic compound-containing exhaust flow through a heated ceramic bed. The temperature of the ceramic stone bed is high enough to ensure that the exhaust stream will be at the minimum temperature to oxidize the organic compounds in the exhaust as they flow through a catalyst. Oxidation converts the organic compounds to CO_2 and H_2O. The exhaust air then flows through another ceramic bed. By constantly cycling the air stream between the ceramic beds, the RCO achieves a high heat recovery rate and low operating costs.

20. In addition to the VOC from bread baking, there are emissions from the combustion of natural gas. See attached Emission Detail Sheets for more information.

21. These emission units are subject to the visible emission limitations under LRAPA 32-010(3). They may not have visible emissions equal to or greater than 20% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour. Compliance is demonstrated through a plant survey of visible emissions to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or to conduct a Modified EPA Method 9 test within 24 hours. No significant visible emissions are expected from these sources because they use natural gas in any associated ovens – a clean burning fuel.

22. These emission units are subject to particulate matter emission limitations under LRAPA 32-015(2)(b). For sources installed, constructed or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are no representative compliance source tests, the particulate matter emission limit is 0.14 grains per dry standard cubic foot. EU-3 and EU-4 are subject to this particulate matter emission limit. For sources installed, constructed, or modified after April 16, 2015, the particulate matter emission limit is 0.10 grains per dry standard cubic foot. EU-6 is subject to this particulate matter emission limit. Compliance is demonstrated through a plant survey of visible emissions to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or to conduct a Modified EPA Method 9 test within 24 hours. No significant particulate matter emissions are expected from these sources because they use natural gas in any associated ovens – a clean burning fuel.

EMISSION LIMITS FOR INSIGNIFICANT ACTIVITIES

23. As identified earlier in this Review Report, this facility has insignificant emissions units (IEUs) that include categorically insignificant activities and aggregate insignificant emissions, as defined in LRAPA Title 12 and/or OAR 340-200-0020. For the most part, the standards that apply to IEUs are for opacity and particulate matter. LRAPA does not consider it likely that IEUs could exceed an applicable emissions limit or standard because IEUs are generally equipment or activities that do not have any emission controls (e.g., small natural gas-fired space heaters) and/or do not typically have visible emissions. Since there are typically no controls, no visible emissions, and/or the emissions are less than one (1) ton per year, LRAPA does not require monitoring, recordkeeping, or reporting for IEUs as necessary for assuring compliance with the standards.

Aggregate Insignificant Activity – Gasoline Dispensing Facility (GDF)

24. The facility has one 10,000 gallon above ground storage tank for dispensing gasoline. The monthly throughput is less than 10,000 gallons. This emission unit is subject to the applicable requirements under LRAPA 44-170 through 44-280.

25. Because this storage tank has a capacity of more than 250 gallons, the facility must comply with the work practices requirements and the submerged fill requirements in LRAPA 44-230. Because the monthly and annual throughput of gasoline does not exceed the thresholds under LRAPA 44-190(4), the facility is not subject to the vapor balancing requirements in LRAPA 44-240.

26. This emission unit is also subject to the requirements under 40 CFR Part 63 Subpart CCCCCC – National Emission Standards of Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities. These requirements are similar to the requirements under LRAPA 44-170 through 44-280. See the Federal Requirements section of this review report for more information.

Categorically Insignificant Activity – 85 kW Natural Gas-Fired Emergency RICE

27. The facility has one (1) 85 kW natural gas-fired emergency RICE installed before June 12, 2006, which is subject to the requirements under 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The emergency generator is

considered to be an existing emission unit at an area source of federal HAPs. See the Federal Requirements section of this review report for more information.

FEDERAL REQUIREMENTS

Chemical Accident Prevention Provisions

28. The Title V permit includes standard language related to 40 CFR Part 68 – Chemical Accident Prevention Provisions. Should the material storage rates at this facility subject this facility to 40 CFR Part 68, the facility must satisfy all the applicable risk management requirements, including the development of a risk management plan.

National Emission Standards for Hazardous Air Pollutants

40 CFR 63 Subpart CCCCCC – National Emission Standards of Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

29. A facility that has potential emissions of federal HAP less than the major source thresholds of 10 tons per year of an individual federal HAP or 25 tons per year of the aggregate or is has obtained federally-enforceable permit limits to restrict HAP emissions below the major source thresholds prior to a major NESHAP compliance date can be classified as an area source. As the potential emissions from this facility are less than the major source thresholds, the gasoline dispensing facility (GDF) is subject to the requirements under 40 CFR Part 63 Subpart CCCCCC – National Emission Standards of Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities. Under the regulation, the GDF is considered an existing GDF.

30. The amount of gasoline dispensed at the GDF is approximately 1200 gallons per month. This GDF is equipped with a submerged fill pipe as required. Other requirements include good housekeeping and recordkeeping. LRAPA 44-170 through 44-290 mirror the federal requirements.

31. The 40 CFR Part 63 Subpart CCCCCC requirements that are applicable to the existing GDF at the facility are identified in the following table:

40 CFR Part 63, Subpart CCCCCC citation	Description	Applicable to source (yes/no)	Comments	Permit condition
63.11110	Purpose	Yes	None	NA
63.11111	Applicability	Yes	The facility is a GDF and has a monthly throughput of less 10,000 gallons per month.	40
63.11112	Emission sources covered	Yes	None	NA
63.11113	Compliance dates	Yes	The compliance date for an existing source is no later than January 10, 2008.	NA
63.11115	General duties	Yes	None	41
63.11116	Requirements: <10,000 gallons per month	Yes	None	42
63.11117	Requirements: ≥ 10,000 gallons per month	No	None	NA
63.11118	Requirements: ≥ 100,000 gallons per month	No	None	NA

40 CFR Part 63, Subpart CCCCCC citation	Description	Applicable to source (yes/no)	Comments	Permit condition
63.11120	Testing and monitoring	No	None	NA
63.11124	Notifications	No	None	NA
63.11125	Recordkeeping	Yes	Keep records of malfunctions as listed under 40 CFR 63.11125(d)	43
63.11126	Reporting	Yes	Report any malfunctions.	44
63.11130	General provisions	Yes	None	NA
63.11131	Implementation and enforcement	Yes	None	NA
63.11132	Definitions	Yes	None	NA

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

32. The facility has one (1) 85 kW natural gas-fired emergency RICE installed before June 12, 2006, which is subject to the requirements under 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The emergency generator is considered to be an existing emission unit at an area source of federal HAPs.

33. The 40 CFR Part 63 Subpart ZZZZ requirements that are applicable the one (1) 85 kW natural gas-fired emergency RICE are identified in the following table:

40 CFR Part 63, Subpart ZZZZ citation	Description	Applicable to source (yes/no)	Comments	Permit condition
63.6580	Purpose	Yes	None	NA
63.6585	Applicability	Yes	None	NA
63.6590	Applicability	Yes	None	NA
63.6600	Emission limitations	No	None	NA
63.6601	Emission limitations	No	None	NA
63.6602	Emission limitations	No	None	NA
63.6603	Emission limitations	Yes	None	45, 47
63.6604	Fuel requirements	No	None	NA
63.6605	General requirements	Yes	None	49
63.6610	Initial compliance	No	None	NA
63.6611	Initial performance test	No	None	NA
63.6612	Initial performance test	No	None	NA
63.6615	Subsequent performance tests	No	None	NA
63.6620	Performance test procedures	No	None	NA
63.6625	Monitoring and maintenance requirements	Yes	None	46, 48
63.6630	Initial compliance	No	None	NA
63.6635	Continuous compliance	No	None	NA
63.6640	Continuous compliance	Yes	None	50
63.6645	Notifications	No	None	NA
63.6650	Reports	Yes	None	55

40 CFR Part 63, Subpart ZZZZ citation	Description	Applicable to source (yes/no)	Comments	Permit condition
63.6655	Records	Yes	None	51-54
63.6660	Record retention	Yes	None	56
63.6665	General provisions	Yes	None	NA
63.6670	Implementation and enforcement	Yes	None	NA
63.6675	Definitions	Yes	None	NA

New Source Performance Standards

34. This facility is not subject to any NSPS at this time.

COMPLIANCE ASSURANCE MONITORING

35. Title 40, Part 64 of the Code of Federal Regulations (CFR) contains Compliance Assurance Monitoring (CAM) requirements. CAM requirements apply to any Pollutant Specific Emissions Unit (PSEU) at a Part 70 source that meets the following criteria:
    - 35.a. The unit is subject to an emission limitation or standard for a regulated air pollutant;
    - 35.b. The unit uses a control device to achieve compliance with that emission limitation or standard;
    - 35.c. The unit, by itself, has potential pre-control emissions of the regulated air pollutant that would make it a major source (i.e. greater than 100 tons per year for criteria pollutants; greater than 10 tons per year for individual Federal HAPs); and
    - 35.d. The exemptions in 40 CFR §64.2(b) do not apply.

36. The only emission unit at this facility that uses a control device is EU-6. EU-6 has potential pre-control emissions of VOCs that exceed the major source threshold of 100 tons of VOC per year. However, EU-6 does not use the control device to achieve compliance with an emission limitation or standard. Thus, EU-6 is not subject to CAM.

Emission Unit	Pollutant	Does EU-6 emit over 100 tons of the Pollutant per year	Does the EU-6 have a Control Device for this Pollutant	Is there an Emission Limitation or Standard for this Pollutant	Is EU-6 Subject to CAM for the Pollutant
EU-6	VOC	Yes	Yes	No	No

PLANT SITE EMISSION LIMITS, BASELINE EMISSION RATE AND SIGNIFICANT EMISSION RATE

37. Provided below is a summary of the baseline emissions rate, netting basis, plant site emission limit, and emissions capacity.

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)			SER (tons/yr)
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase over netting basis (tons/yr)	
PM	1	1	1	24	24	23	25
PM_{10}	1	1	1	14	14	13	15
$PM_{2.5}$	NA	1	1	9	9	8	10
SO_2	0	NA	NA	NA	NA	--	40
NOx	0	0	0	39	39	39	40
CO	0	0	0	99	99	99	100
VOC	98	98	98	137	137	39	40
GHG	3,235	NA	3,235	NA	74,000	70,765	75,000

38. The baseline emission rates were established based upon the following:
    38.a. The baseline emission rates for all regulated pollutants except $PM_{2.5}$ and GHGs were determined in previous permitting actions and there are no changes.
    38.b. A baseline emission rate is not established for $PM_{2.5}$ in accordance with LRAPA 42-0048(3). This is a change from other reviews under previous permit actions.
    38.c. This review report establishes the baseline emission rate for GHGs. The baseline emission rate for greenhouse gases (GHG) is based on the natural gas usage during the consecutive 12-month period of calendar year 2009. Based upon the emission inventory, the facility combusted 553,708 therms of gas during this period resulting in approximately 3,235 tons of GHGs as CO_2 equivalents.

39. The netting basis was established based upon the following:
    39.a. Under LRAPA 42-0046(b), a source's initial netting basis for $PM_{2.5}$ is equal to the overall $PM_{2.5}$ fraction of the PM_{10} PSEL in effect on May 1, 2011 multiplied by the PM_{10} netting basis in effect on May 1, 2011. As the PM_{10} resulting from this facility is predominately resulting from combustion sources and bin vent baghouses, LRAPA assumes the $PM_{2.5}$ fraction was greater than 50% of the PM_{10} fraction. Due to rounding, the $PM_{2.5}$ netting basis is established at 1 ton per year.
    39.b. No netting basis is established for SO_2 because no PSELs are required for any regulated pollutant that will be emitted at less than the de minimis emission level listed in LRAPA Title 12 from the entire source as listed in LRAPA 42-0020(3)(a).
    39.c. The netting basis is equal to the baseline emission rates for all pollutants except fine particulates ($PM_{2.5}$), since the facility has not had any Prevention of Significant Deterioration approvals under 38-0060. The netting basis for $PM_{2.5}$ is being established for the first time in this permit action in accordance with 42-0046(2)(b).

40. The PSELs were established based upon the following:
    40.a. The facility requested source specific PSELs for PM, PM_{10}, $PM_{2.5}$, NOx, CO and GHGs be set at the generic PSEL level in order to maintain the netting basis for these pollutants, as applicable, as allowed under LRAPA 42-0020(4)(b).
    40.b. The facility requested an increase in the VOC PSEL of 39 tons per year under the Standard ACDP issued on September 3, 2010. The Standard ACDP application was also accompanied by an initial application to obtain a Title V permit.
    40.c. The facility has not requested any changes in the facility PSELs as part of this Title V permit renewal.
    40.d. The annual PSEL for VOCs applies to any 13 consecutive 4-week period, and the annual PSEL for all other pollutants applies to any 12-consecutive calendar month period.

UNASSIGNED EMISSIONS AND EMISSION REDUCTION CREDITS

41. The facility has zero (0) tons/year of unassigned emissions as shown in the table below. Unassigned emissions are equal to the netting basis minus the source's current PTE, minus any banked emission reduction credits. The facility has zero (0) tons of emission reduction credits. In accordance with LRAPA 42-0055 the maximum unassigned emissions may not be more than the SER.

Pollutant	Unassigned Emissions (tons/yr)	Emission Reduction Credits (tons/yr)	SER (tons/yr)
PM	0	0	25
PM_{10}	0	0	15
$PM_{2.5}$	0	0	10
SO_2	0	0	40
NO_x	0	0	40
CO	0	0	100
VOC	0	0	40
GHGs	0	0	75,000

SIGNIFICANT EMISSION RATE

42. The proposed PSEL is equal to the previously established PSEL. There are no increases in the PSEL being requested with this Title V permit action. An analysis of the proposed PSEL increases over the Netting Basis is shown in the following table:

Pollutant	SER (tons/yr)	Requested Increase Over Previous Netting Basis	Increase Due to Utilizing Capacity That Existed In The Baseline Period	Increase Due to Physical Changes or Changes In The Method of Operation	Increase Due to Use of Generic PSEL Level
PM	25	23	0	0	23
PM_{10}	15	13	0	0	13
$PM_{2.5}$	10	8	0	0	8
SO_2	40	--	--	--	--
NO_x	40	39	0	0	39
CO	100	99	0	0	99
VOC	40	39	0	0	39
GHGs	75,000	70,765	0	0	70,765

HAZARDOUS AIR POLLUTANTS (HAPs)

43. This facility is not a major source of federal HAPs because potential federal HAPs emissions are less than 10 tons per year for any single HAP and 25 tons per year for the aggregate of federal HAPs. As such, the facility is considered an area source. Emissions factors for estimating HAP emissions are shown in the attached Emission Detail Sheets.

Pollutant	Potential to Emit (tons/year)
Acetaldehyde	1.92
Total NG Combustion HAPs	0.33
Total HAPs =	**2.25**

TITLE V PERMIT CHANGE LOG

44. The following is a list of condition-by-condition changes between the previous permit and the proposed permit:

New Permit Condition Number	Old Permit Condition Number	Description of change	Reason for change
1	1	Added citation authority	Clarity
2	2	Updated condition numbers that are only enforceable by LRAPA	SIP approved regulations have changed
3	3	Added EU-1B and EU-6. Updated aggregate insignificant activities.	New process line constructed under Addendum #1 – Minor Modification issued on 04/17/2018 and off permit change approved 11/16/2018.
4	4	Revised to include the most current regulatory language	LRAPA rules were amended on 01/11/2018.
5	5	No change	NA
6	6	Revised to reflect the most current language. Clarified citation authority.	Clarity and consistency.
7	7	Revised to reflect the most current language.	Clarity and consistency.
8	--	Added applicable requirement.	Title V permits must include all applicable requirements.
9	8	Revised to include LRAPA notification requirements and reporting requirements.	Title V permit must include compliance demonstration, monitoring and recordkeeping for all applicable requirements.
10	9	No change	NA
11	10	Removed references to fugitive emissions. This regulation only applies to direct source emissions.	LRAPA rules were amended on 01/11/2018.
12	11	Revised the permit language to reflect the regulatory text.	LRAPA rules were amended on 01/11/2018.
13	12	No change	NA
14	--	Added opacity requirement for equipment authorized under Amendment #1 – Minor Modification issued on 04/17/2018.	Title V permits must include all applicable requirements.
15	--	Added particulate matter requirement for equipment authorized under Amendment #1 – Minor Modification issued on 04/17/2018.	Title V permits must include all applicable requirements.
16	--	Added applicable requirements for new silos	Title V permits must include all applicable requirements.

New Permit Condition Number	Old Permit Condition Number	Description of change	Reason for change
17-22	--	Incorporated conditions from Amendment #1 – Minor Modification issued on 04/17/2018.	Title V permits must include all applicable requirements.
23	16	Revised and expanded	LRAPA rules were amended on 01/11/2018.
24-39	13-15	Revised to include all applicable requirements from LRAPA 44-170 through 44-290	Title V permit must include compliance demonstration, monitoring and recordkeeping for all applicable requirements.
40-44	--	Added applicable 40 CFR 63 subpart CCCCCC requirements	Title V permits must include all applicable requirements.
45-56	--	Added applicable 40 CFR 63 subpart ZZZZ requirements.	Title V permits must include all applicable requirements.
57	17	Included PSELs for GHGs.	GHGs became regulated air pollutants during the previous permit term.
58	18	No change	NA
59	19	Modified to reflect changes in Amendment #1 – Minor Modification issued on 04/17/2018.	Title V permits must include all applicable requirements.
60	20	No change	NA
61	21	Updated the table to include GHG emission factors for applicable emission units from Amendment #1 – Minor Modification issued on 04/17/2018.	GHGs became regulated air pollutants during the previous permit term.
62	22	No change	NA
63	23	Updated citation authority.	Clarity and consistency.
64	--	Added general testing requirements from Amendment #1 – Minor Modification issued on 04/17/2018.	Title V permits must include all applicable requirements.
65-68	24-27	No change	NA
69	--	Added general recordkeeping requirement from Amendment #1 – Minor Modification issued on 04/17/2018.	Title V permits must include all applicable requirements.
70	28	Updated citation authority	Clarity and consistency.
71-72	29-30	No change	NA
--	31	Condition removed and replaced with Condition 45 from Amendment #1 – Minor Modification issued on 04/17/2018.	Title V permits must include all applicable requirements.
73-75	32-34	No change	NA
76	--	Added GHG reporting language.	Title V permits must include all applicable requirements.
77	35	Updated the address for US EPA	Standard permit template language
78-81	36-38	No change	NA
82	--	Included a non-applicable requirements table	Informational.
General Conditions G1. - G 29.	General Conditions G1. - G28.	Updated general conditions to most recent template	Standard permit template language

GENERAL RECORDKEEPING REQUIREMENTS

45. The permit includes requirements for maintaining records of all testing, monitoring, and production information necessary for assuring compliance with the standards and calculating plant site emissions. The records of all monitoring specified in the Title V permit must be kept at the plant site for at least 5 years.

GENERAL REPORTING REQUIREMENTS

46. The permit includes a requirement for submitting semi-annual and annual monitoring reports that include semi-annual compliance certifications. Excess emissions are required to be reported to LRAPA immediately as well as in a logbook attached to the annual report. Emissions fees reports are required annually.

COMPLIANCE HISTORY

47. This facility is regularly inspected by LRAPA. The following table indicates the compliance history of this facility since the issuance of the last Title V operation permit on June 15, 2011

Type of Inspection	Date	Results
Full Compliance Evaluation	01/19/2012	In compliance
Full Compliance Evaluation	04/08/2013	In compliance
Full Compliance Evaluation	07/23/2015	In compliance
Full Compliance Evaluation	07/27/2017	In compliance

48. Since the issuance of the last Title V operation permit on June 15, 2011, LRAPA has not issued any violation notices to or taken any enforcement action against this facility.

SOURCE TEST RESULTS

49. No source testing has been conducted at this facility. Under the minor modification to the Title V permit issued on April 17, 2018, the permittee is required to test the RCO within 12 months of startup to demonstrate the oxidizer is capable of operating with a destruction efficiency of at least 95%. During the same testing, the permittee is required to perform visible emissions testing for a period of at least six minutes for each of the three required test runs.

PUBLIC NOTICE

50. This permit was on public notice from February 22, 2019 to March 27, 2019. No comments were submitted in writing during the comment period. No public hearing was requested by 10 or more individuals or one person representing a group of 10 or more individuals. After the comment period and hearing, if requested, LRAPA will review the comments and modify the permit as may be appropriate. A proposed permit will then be sent to EPA for a 45-day review period. LRAPA may request and EPA may agree to an expedited review of 5 days if there were no substantive or adverse comments during the comment period.

    If the EPA does not object in writing, any person may petition the EPA within 60 days after the expiration of EPA's 485-day review period to make such objection. Any such petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in OAR 340-218-0210, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.

EPA REVIEW

51. This proposed permit was sent to EPA on April 4,2019, for a 45-day review period. Because no adverse comments were received and there were no substantive changes to the permit after the public comment period, LRAPA requested and EPA agreed to expedited review. The public will have 105 days (45-day EPA review period plus 60 days) from the date the proposed permit was sent to EPA to appeal the permit with EPA.

JJW/CMW
04/09/2019

Franz Family Bakeries - 208922
Emission Detail Sheets

Facility Emission Summary

EU ID	Emission Unit Description	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC	GHG
EU-1A	Seven (7) Bulk Flour Silos	2.79	2.79	2.79	--	--	--	--	--
EU-1B	Six (6) Bulk Flour Silos	1.80	1.80	1.80	--	--	--	--	--
EU-5	Gasoline Dispensing Facility (GDF)	--	--	--	--	--	--		--
EU-2	7.5 MMBtu/hr Thermal Oil System, natural gas fired	0.08	0.08	0.08	0.05	3.22	2.71		3,839
EU-3	12 MMBtu/hr Bread Oven, Process Line 1	0.13	0.13	0.13	0.09	5.15	4.33	137	6,142
EU-4	6.1 MMBtu/hr Bun Oven, Process Line 2	0.07	0.07	0.07	0.04	2.62	2.20		3,122
EU-6	7.1 MMBtu/hr Bread Oven, Process Line 3	0.15	0.15	0.15	0.10	6.00	5.04		7,153
EU-AIA	Total Aggregate Insignificant Emissions	1.00	1.00	1.00	--	--	--		--
	Total =	6.01	6.01	6.01	0.29	17.0	14.3	137	20,255

Note: The total emissions of VOCs from significant and aggregate insignificant emissions must not exceed 137 TPY.

Aggregate Insignificant Emissions

EU ID	Emission Unit Description	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC	GHG
EU-AIA	Gasoline Dispensing Facility (GDF)	--	--	--	--	--	--	0.29	--
EU-AIA	Dump Station	0.30	0.30	0.30	--	--	--	--	--
	Total =	0.30	0.30	0.30	0.0	0.0	0.0	0.29	0

Franz Family Bakeries - 208922
Emission Detail Sheets

Natural Gas Combustion Units

EU ID	Emission Unit	Rating	Unit
EU-2	Thermal Oil System	7.5	MMBtu/hr
EU-3	Bread Oven, Process Line 1	12	MMBtu/hr
EU-4	Bun Oven, Process Line 2	6.1	MMBtu/hr
EU-6	Bread Oven, Process Line 3	7.1	MMBtu/hr
EU-6	Regenerative Catalytic Oxidizer	6.875	MMBtu/hr
CI	Crouton Dryer	0.75	MMBtu/hr
	Total =	40.325	MMBtu/hr

Avg. Gross Heat Value of Natural Gas
1020 MMBtu/MMCF

Natural Gas Combustion Emissions

	PM		PM_{10}		$PM_{2.5}$		SO2		NOx		CO		VOC		GHGs
EU ID	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	TPY
EU-2	1.8E-02	0.08	1.8E-02	0.08	1.8E-02	0.08	1.9E-02	5.5E-02	0.74	3.22	0.62	2.71	4.0E-02	0.18	3,839
EU-3	2.9E-02	0.13	2.9E-02	0.13	2.9E-02	0.13	3.1E-02	8.8E-02	1.18	5.15	0.99	4.33	6.5E-02	0.28	6,142
EU-4	1.5E-02	0.07	1.5E-02	0.07	1.5E-02	0.07	1.6E-02	4.5E-02	0.60	2.62	0.50	2.20	3.3E-02	0.14	3,122
EU-6	1.7E-02	0.08	1.7E-02	0.08	1.7E-02	0.08	1.8E-02	5.2E-02	0.70	3.05	0.58	2.56	3.8E-02	0.17	3,634
EU-6	1.7E-02	0.07	1.7E-02	0.07	1.7E-02	0.07	1.8E-02	5.0E-02	0.67	2.95	0.57	2.48	3.7E-02	0.16	3,519
CI	1.8E-03	8.1E-03	1.8E-03	8.1E-03	1.8E-03	8.1E-03	1.9E-03	5.5E-03	0.07	0.32	0.06	0.27	4.0E-03	1.8E-02	384
Total =	9.9E-02	0.43	9.9E-02	0.43	9.9E-02	0.43	0.10	0.29	3.95	17.3	3.32	14.5	0.22	0.95	20,639

Natual Gas Combustion Emission Factors

			SO_2					
PM	PM_{10}	$PM_{2.5}$	Hourly	Annual	NOx	CO	VOC	GHGs
2.5	2.5	2.5	2.6	1.7	100	84	5.5	512

All emission factors are from ODEQ AQ-EF05 - Emission Factors from Gas Fired Boilers (uncontrolled medium boilers < 100 million Btu/hr), except GHGs
All emission factors expressed as pounds of pollutant per MMCF of natural gas combusted, exept GHGs
GHG emission factor is expressed as (tons of GHG x hr)/(MMBtu per year)
GHG emission factor is derived from 40 CFR 98, Tables C-1 and C-2 using GWP of 1 for CO2, 25 for methane, and 298 for nitrous oxide

Franz Family Bakeries - 208922
Emission Detail Sheets

EU ID	Emission Unit	Max Exhaust (acfm)	# of Exhaust Points	EF (gr/acf)	Conversion Factors			PM	PM	PM10	PM10	PM2.5	PM2.5
					lb/gr*	min/hr	hr/yr	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-1A	7 Flour Silos	1060	7	0.01	0.000143	60	8760	0.64	2.79	0.64	2.79	0.64	2.79
EU-1B	6 Flour Silos	800	6	0.01	0.000143	60	8760	0.41	1.80	0.41	1.80	0.41	1.80
AIE	Dump Station	800	1	0.01	0.000143	60	8760	0.07	0.30	0.07	0.30	0.07	0.30
							Total =	1.05	4.59	1.05	4.59	1.05	4.59

7,000 grains is equivalent to 1 pound

AI is an aggregated insignificant emission unit as defined under Title 12

Franz Family Bakeries - 208922
Emission Detail Sheets

VOC for Bread Making (Reference EPA AP-42 Section 9.9.6)
$VOC\ EF = 0.95Y_I + 0.195t_I - 0.51S - 0.86t_s + 1.90$
Where:
VOC EF is in pounds VOC per ton of baked bread (lb/ton)
Y_I = initial baker's percent of yeast
t_I = total yeast action time in hours
S = final (spike) baker's percent of yeast
t_s = spiking time in hours
And:
$E_I = E_I\ VOC\ EF_I \times P_I$
Where:
E_I = VOC emission per product type in pounds
E_I VOC EF = Emission factor in pounds of VOC per ton of product
P_I = Amount of dough per product type produced in tons

VOC emissions from EU-6 are controlled by at least 95% by a RCO.
VOC emissions from bread baking not to exceed 137 TPY, including the VOC from natural gas combustion.

Federal Hazardous Air Pollutants

Contaminant	% (by wt.)	Potential TPY
Ethanol	97.63	134
Acetaldehyde	1.4	1.92
Acetone	0.43	0.59
Isobutanol	0.54	0.74

HAP emissions from baking are based on San Diego Air Pollution Control District, Baking Operations (March 12, 1998).
Percentages are derived from Determination of VOC, Ethanol, and Acetaldehyde Emissions from Commericial Bakeries (EPA/68-D9-0054, September 1992)

Franz Family Bakeries - 208922
Emission Detail Sheets

Gasoline Dispensing Facility (GDF) - VOCs
VOC Emission Factors (AP-42 and CARB)
Submerged Fill AST

10	lb/1000 Gals
7.5	lb/1000 Gals
10	lb/1000 Gals
0.7	lb/1000 Gals
28.2	lb/1000 Gals

Max. Throughput = 1,700 Gals/mo

Pollutant	TPY
VOC	0.29