



State of Utah

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Department of
Environmental Quality

Kimberly D. Shelley
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DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN116520005-22

August 18, 2022

Andrew Peedle
Danone US, LLC
6165 West Dannon Way
West Jordan, UT 84081
andrew.peedle@danone.com

Dear Mr. Peedle:

Re: Intent to Approve:
Modification to Approval Order DAQE-AN116520004-22 to add a Fourth Boiler
Project Number: N116520005

The attached document is the Intent to Approve (ITA) for the above-referenced project. The ITA is subject to public review. Any comments received shall be considered before an Approval Order (AO) is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Future correspondence on this ITA should include the engineer's name, **John Persons**, as well as the DAQE number as shown on the upper right-hand corner of this letter. John Persons, can be reached at (385) 306-6503 or jpersons@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

ADH:JP:jg

cc: Salt Lake County Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN116520005-22
Modification to Approval Order DAQE-AN116520004-22
to add a Fourth Boiler

Prepared By
John Persons, Engineer
(385) 306-6503
jpgersons@utah.gov

Issued to
Danone US, LLC - West Jordan Dairy Food Processing Plant

Issued On
August 18, 2022

A handwritten signature in black ink, appearing to read "Alan D. Humpherys", with a stylized, cursive script.

New Source Review Section Manager
Alan D. Humpherys

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name

Danone US, LLC

Source Name

Danone US, LLC - West Jordan Dairy Food Processing Plant

Mailing Address

6165 West Dannon Way
West Jordan, UT 84081

Physical Address

6165 West Dannon Way (9280 South)
West Jordan, UT 84081

Source Contact

Name Andrew Peedle
Phone (801) 332-0145
Email andrew.peedle@danone.com

UTM Coordinates

412,330 m Easting
4,492,835 m Northing
Datum NAD83
UTM Zone 12

SIC code 2026 (Milk, Fluid)

SOURCE INFORMATION

General Description

Danone US, LLC (Danone) operates a dairy food manufacturing plant in West Jordan, Salt Lake County. Danone receives milk and transforms it into yogurt. Boilers make steam and hot water that is used in the yogurt-making process. Yogurt is packaged in various sizes and volumes at the plant.

NSR Classification

Minor Modification at Minor Source

Source Classification

Located in Northern Wasatch Front O3 NAA, Salt Lake City UT PM_{2.5} NAA, Salt Lake County SO₂ NAA
Salt Lake County
Airs Source Size: B

Applicable Federal Standards

NSPS (Part 60), A: General Provisions
NSPS (Part 60), Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
NSPS (Part 60), IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
NSPS (Part 60), JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
MACT (Part 63), A: General Provisions
MACT (Part 63), ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Project Description

Danone has requested to add a fourth natural gas boiler rated at 32.715 MMBtu/hr to their West Jordan Dairy Food Processing Plant. The NO_x emissions from this boiler will be controlled with an ultra-low NO_x burner (9 ppm NO_x).

SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
CO ₂ Equivalent	16766.37	47115.37
Carbon Monoxide	2.69	24.04
Nitrogen Oxides	1.51	27.87
Particulate Matter - PM ₁₀	1.07	3.06
Particulate Matter - PM _{2.5}	1.07	3.06
Sulfur Dioxide	0.08	0.31
Volatile Organic Compounds	0.51	1.99

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Formaldehyde (CAS #50000)	21	81
Hexane (CAS #110543)	505	1425
	Change (TPY)	Total (TPY)
Total HAPs	0.26	0.75

PUBLIC NOTICE STATEMENT

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Director.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Salt Lake Tribune and Deseret News on August 21, 2022. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing within 15 days of publication, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
I.8	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-8]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.A THE APPROVED EQUIPMENT

II.A.1	West Jordan Plant Dairy Food Processing Plant
II.A.2	Boilers Boiler 1: One (1) rated at 20.9 MMBtu/hr Boiler 2: One (1) rated at 16.738 MMBtu/hr Boiler 3: One (1) low-NO _x rated at 20.9 MMBtu/hr Low-NO _x : 30 ppm Fuel: natural gas Boiler 4: One (1) Ultra low-NO _x rated at 32.715 MMBtu/hr (NEW) Ultra low-NO _x : 9 ppm Fuel: natural gas NSPS Subpart Dc
II.A.3	Emergency Generator Engines One (1) rated at 35 kW (new) Fuel: natural gas Manufactured in 2013 One (1) rated at 125 kW Fuel: natural gas Manufactured in 1996 One (1) rated at 563 kW Fuel: diesel or fuel oil Manufactured in 2011 NSPS Subpart IIII or Subpart JJJJ MACT Subpart ZZZZ
II.A.4	Dust Collector One (1) wet particle collector - internally vented For information purposes.

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	Site-Wide Requirements
II.B.1.a	<p>The owner/operator shall not allow visible emissions from any stationary point or fugitive emission source associated with the source or with the control facilities to exceed the following:</p> <p>A. All boilers - 10% opacity</p> <p>B. The 35 kW and 125 kW emergency generator engines - 10% opacity</p> <p>C. All other points - 20% opacity.</p> <p>[R307-401-8]</p>
II.B.1.a.1	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.b	The owner/operator shall install the low-NO _x boiler (Boiler 3) that is specified to meet a NO _x emission concentration of 30 ppm, or less. [R307-401-8]
II.B.1.b.1	The owner/operator shall keep a record of the manufacturer's specification of the emission concentration. The record shall be kept for the life of the equipment. [R307-401-8]
II.B.1.c	The owner/operator shall install an ultra-low NO _x burner on Boiler 4 that is specified to meet a NO _x emission concentration of 9 ppm, or less. [R307-401-8]
II.B.1.c.1	The owner/operator shall keep a record of the manufacturer's specification of the emission concentration. The record shall be kept for the life of the equipment. [R307-401-8]
II.B.1.d	The owner/operator shall install and operate an internal flue gas recirculation system on Boiler 4. [R307-401-8]
II.B.1.e	The owner/operator shall only use natural gas as fuel in all boilers. [R307-401-8]
II.B.2	Emergency Engine Requirements
II.B.2.a	The owner/operator shall use only natural gas in the 35 kW and 125 kW emergency generator engines. [R307-401-8]
II.B.2.b	The owner/operator shall only use diesel fuel (e.g. fuel oil #1, #2, or diesel fuel oil additives) as fuel in the 563 kW emergency generator engine. [R307-401-8]
II.B.2.b.1	The owner/operator shall only combust diesel fuel that meets the definition of ultra-low sulfur diesel (ULSD), which has a sulfur content of 15 ppm or less. [R307-401-8]
II.B.2.b.2	To demonstrate compliance with the ULSD fuel requirement, the owner/operator shall maintain records of diesel fuel purchase invoices or obtain certification of sulfur content from the diesel fuel supplier. The diesel fuel purchase invoices shall indicate that the diesel fuel meets the ULSD requirements. [R307-401-8]

II.B.2.c	The owner/operator shall not operate each emergency engine on site for more than 100 hours per rolling 12-month period during non-emergency situations. There is no time limit on the use of the engines during emergencies. [40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.2.c.1	<p>To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Records documenting the operation of each emergency engine shall be kept in a log and shall include the following:</p> <p>A. The date the emergency engine was used</p> <p>B. The duration of operation in hours</p> <p>C. The reason for the emergency engine usage.</p> <p>[40 CFR 63 Subpart ZZZZ, R307-401-8]</p>
II.B.2.c.2	To determine the duration of operation, the owner/operator shall install a non-resettable hour meter for each emergency engine. [40 CFR 63 Subpart ZZZZ, R307-401-8]

PERMIT HISTORY

This Approval Order shall supersede (if a modification) or will be based on the following documents:

Supersedes
Is Derived From

AO DAQE-AN116520004-22 dated March 11, 2022
NOI dated March 9, 2022

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by Environmental Protection Agency to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds