

Lieutenant Governor

Department of Environmental Quality

L. Scott Baird Executive Director

DIVISION OF AIR QUALITY Bryce C. Bird Director

DAQE-IN116520003-20

September 18, 2020

Andrew Peedle Danone US, LLC 6165 West Dannon Way West Jordan, UT 84081

Dear Mr. Peedle:

Re: Intent to Approve:

Modification to Approval Order DAQE-AN0116520002-11 by Adding a Boiler and an

Emergency Generator

Project Number: N116520003

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, **Mr. Tim DeJulis**, as well as the DAQE number as shown on the upper right-hand corner of this letter. Mr. Tim DeJulis, can be reached at (385) 306-6523 or tdejulis@utah.gov if you have any questions.

Sincerely,

Alan D. Humpherys, Manager

alm D. Huzlur

New Source Review Section

ADH:TD:sa

cc: Salt Lake County Health Department

STATE OF UTAH Department of Environmental Quality Division of Air Quality

INTENT TO APPROVE DAQE-IN116520003-20 Modification to Approval Order DAQE-AN0116520002-11 by Adding a Boiler and an Emergency Generator

Prepared By Mr. Tim DeJulis, Engineer (385) 306-6523 tdejulis@utah.gov

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

Issued On September 18, 2020

alm D. Huzlur

New Source Review Section Manager Alan D. Humpherys

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name Source Name

Danone US, LLC - West Jordan Dairy Food

Processing Plant

Mailing Address Physical Address

6165 West Dannon Way (9280 S.)

West Jordan, UT 84081 West Jordan, UT 84081

Source Contact UTM Coordinates

Name Andrew Peedle 412,330 m Easting Phone (801) 299-1661 4,492,835 m Northing

Email andrew.peedle@danone.com

Datum NAD83

UTM Zone 12

SIC code 5143 (Dairy Products, Except Dried or Canned)

SOURCE INFORMATION

General Description

Danone US, LLC (Danone) operates a dairy food manufacturing plant in West Jordan, Salt Lake County. Danone receives the milk product and then transforms it to a yogurt product. There are three (3) boilers used to heat the milk that makes the yogurt product, in various sizes and volumes. The packaging of the yogurt products is done in this 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

MACT (Part 63), A: General Provisions

MACT (Part 63), ZZZZ: NESHAP for Stationary Reciprocating Internal Combustion Engines

Project Description

Danone has requested to replace the boiler, rated at 16.738 MMBtu/hr with a new low-NO_x boiler, rated at 20.9 MMBtu/hr. They have also requested to install a natural gas-fired emergency generator, rated at 35 kW. Danone will change the internally-venting cartridge filter baghouse to a wet particulate collector. A company name change request will be processed, changing the name from The Dannon Company to Danone US, LLC.

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	2321	30349.00
Carbon Monoxide	1.74	21.35
Nitrogen Oxides	3.11	26.36
Particulate Matter - PM ₁₀	0.21	1.99
Particulate Matter - PM _{2.5}	0.21	1.99
Sulfur Dioxide	0.09	0.23
Volatile Organic Compounds	0.20	1.48

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Formaldehyde (CAS #50000)	40	60
Hexane (CAS #110543)	360	920
	Change (TPY)	Total (TPY)
Total HAPs	0.20	0.49

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 ITA will be published in the Salt Lake Tribune and Deseret News on September 21, 2020. 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. [R307-401-18]

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 One (1) rated at 16.738 MMBtu/hr One (1) rated at 20.9 MMBtu/hr One (1) low-NO _x rated at 20.9 MMBtu/hr (new) 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	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:	
	A. All boilers - 10% opacity	
	B. The 35 kW and 125 kW emergency generator engines - 10% opacity	
	C. All other points - 20% opacity	
	[R307-401-8]	
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 that is certified to meet a NO $_x$ emission rate of 9 ppm, or less. [R307-401-8]	
II.B.1.b.1	The owner/operator shall keep a record of the manufacturer's certification of the emission rate. The record shall be kept for the life of the equipment. [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 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	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:	
	A. The date the emergency engine was used	
	B. The duration of operation in hours	
	C. The reason for the emergency engine usage	
	[40 CFR 63 Subpart ZZZZ, R307-401-8]	
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 or will be based on the following documents:

Supersedes	AO DAQE-AN0116520002-11 dated July 20, 2011
Is Derived From	NOI dated March 25, 2019
Incorporates	Additional information dated June 5, 2019
Incorporates	Additional information dated December 18, 2019
Incorporates	Additional information dated June 2, 2020
Incorporates	Additional information dated January 2, 2020
Incorporates	Modeling review completed dated June 29, 2020
Incorporates	Additional information dated June 30, 2020
Incorporates	Additional Information dated July 29, 2020
Incorporates	Additional information dated August 14, 2020

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 CO₂ Carbon Dioxide

CO₂e Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98,

Subpart A, Table Á-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

NAAOS 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

SO₂ 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