State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN159550001-19

June 17, 2019

Lisa Dakis
Intermountain Healthcare
36 South State Street
Salt Lake City, UT 84111

Dear Ms. Dakis:

Re: Intent to Approve:
New Spanish Fork Hospital
Project Number: N159550001

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, **Spencer Nelson,** as well as the DAQE number as shown on the upper right-hand corner of this letter. Spencer Nelson, can be reached at (801) 536-4005 or srnelson@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

BCB:JB:TA:sa

cc: Utah County Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN159550001-19
New Spanish Fork Hospital

Prepared By
Spencer Nelson, Engineer
(801) 536-4005
srnelson@utah.gov

Issued to
Spanish Fork Hospital

New Source Review Section Manager
Alan D. Humpherys

Date: June 17, 2019

TABLE OF CONTENTS

TITLE/SIGNATURE PAGE 1

GENERAL INFORMATION 3

CONTACT/LOCATION INFORMATION 3

SOURCE INFORMATION 3

General Description 3

NSR Classification 3

Source Classification 3

Applicable Federal Standards 3

Project Description 4

SUMMARY OF EMISSIONS 4

PUBLIC NOTICE STATEMENT 4

SECTION I: GENERAL PROVISIONS 5

SECTION II: PERMITTED EQUIPMENT 5

SECTION II: SPECIAL PROVISIONS 6

PERMIT HISTORY 7

ACRONYMS 8

GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
Intermountain Healthcare

Source Name
Spanish Fork Hospital

Mailing Address
36 South State Street
Salt Lake City, UT 84111

Physical Address
765 East Market Place Drive
Spanish Fork, UT 84660

Source Contact
Name Lisa Dakis
Phone (801) 442-3892
Email lisa.dakis@imail.com

UTM Coordinates
445,557 m Easting
4,442,353 m Northing
Datum NAD83
UTM Zone 12

SIC code 8062 (General Medical & Surgical Hospitals)

SOURCE INFORMATION

General Description
IHC will operate a hospital in Spanish Fork, Utah. Boilers supply steam and hot water for the hospital and are primarily fired on natural gas with some using diesel as a backup fuel. Diesel-fired emergency generator engines are used to supply the site with electricity in the case of a power interruption.

NSR Classification
New Minor Source

Source Classification
Located in Southern Wasatch Front O3 NAA, Utah County PM_{10} NAA, Provo UT $PM_{2.5}$ NAA,
Airs Source Size: B

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), IIII: Standards of Performance for Stationary Compression 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
Intermountain Healthcare (IHC) has requested to construct a new hospital and medical office buildings in Spanish Fork, Utah. The site will provide a variety of medical services and will consist of three (3) 1,111kW (1,490 HP) diesel-fired emergency generator engines, four (4) 5 MMBtu/hr dual-fuel hot water boilers, two (2) 4.5 MMBtu/hr dual-fuel steam boilers, and various natural gas-fired boilers with a rating of less than 5 MMBtu/hr. The equipment on site is used to provide steam, hot water, and emergency power.

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)
Carbon Monoxide		5.35
Nitrogen Oxides		8.82
Particulate Matter - PM_{10}		2.62
Particulate Matter - $PM_{2.5}$		2.62
Sulfur Dioxide		0.19
Volatile Organic Compounds		0.73

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Benzene (Including Benzene From Gasoline) (CAS #71432)		3
Formaldehyde (CAS #50000)		23
Generic HAPs (CAS #GHAPS)		12
Hexane (CAS #110543)		532
Toluene (CAS #108883)		2
	Change (TPY)	**Total (TPY)**
Total HAPs		0.29

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 Daily Herald on June 19, 2019. 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	**Spanish Fork Hospital**
II.A.2	**Two (2) Dual-fuel Steam Boilers** Max Rating: 4.5 MMBtu/hr (each) Fuel: Natural gas and diesel

II.A.3	**Four (4) Dual-fuel Hot Water Boilers** Max Rating: 5 MMBtu/hr (each) Fuel: Natural gas and diesel
II.A.4	**Three (3) Emergency generator Engine** Max Engine Rating: 1,490 HP (each) Fuel: Diesel NSPS/MACT applicability: 40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ
II.A.5	**Various boilers less than 5 MMBtu/hr each** Fuel: Natural gas - For information Only

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 the following emission points to exceed the specified values at the exhaust stack: A. All boilers when fired on natural gas - 10% opacity B. All boilers when fired on diesel - 20% opacity B. All emergency generator engines - 20% opacity [R307-305-3, R307-401-8]
II.B.1.a.1	Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3]
II.B.2	**Boiler Requirements**
II.B.2.a	The owner/operator shall use natural gas as the primary fuel in all dual-fuel boilers. [R307-401-8]
II.B.2.b	The owner/operator shall not use fuel oil in the dual-fuel boilers for more than 48 hours each, per rolling 12-month period for periodic testing, maintenance, or operator training. There is no time limit on the use of fuel oil in the dual-fuel boilers during periods of natural gas curtailment, gas supply interruption, or startups. [40 CFR 63 Subpart JJJJJJ, R307-401-8]
II.B.2.b.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 fuel oil usage in each dual-fuel boiler shall be kept in a log and shall include the following: A. The date fuel oil was used B. The duration of operation in hours C. The reason for fuel oil usage [R307-401-8]

II.B.3	**Emergency Generator Engine Requirements**
II.B.3.a	The owner/operator shall not operate each emergency generator 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 engine during emergencies. [40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.3.a.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.3.a.2	To determine the duration of operation, the owner/operator shall install a non-resettable hour meter on each emergency generator engine on site. [40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.3.b	The owner/operator shall perform maintenance and testing of the emergency generator engines during non-emergency situations in accordance with the following: A. A maximum of one (1) engine shall be operated at any one (1) time during maintenance and testing operations; and B. Maintenance and testing operations shall occur a maximum of one (1) time per month, per engine. C. Maintenance and testing operations shall not occur between the hours of 6pm and 6am. [R307-401-8]
II.B.3.b.1	To determine compliance with the maintenance and testing requirements, the owner/operator shall document the date and the hours of the day that the maintenance and testing was performed and the generator engine that was maintained and tested. The owner/operator shall maintain records anytime an engine is tested. [R307-401-8]
II.B.4	**Fuel Requirements**
II.B.4.a	The sulfur content of any fuel oil or diesel burned shall not exceed 15 ppm by weight. [R307-401-8]
II.B.4.a.1	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of fuels shall be either the owner/operator's own testing, or test reports from the fuel marketer. [R307-203-1]

PERMIT HISTORY

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

Is Derived From	NOI dated August 31, 2018
Is Derived From	NOI Addendum dated February 18, 2019
Incorporates	Modeling Memo DAQE-MN159550001-19 dated March 26, 2019
Is Derived From	NOI Addendum dated April 23, 2019
Incorporates	Additional Information dated June 6, 2019

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_2e	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
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