


Statement of Basis

**Permit to Construct No. P-2011.0011
Project ID 61376**

**Northwest Pipeline LLC
Burley Compressor Station
Murtaugh, Idaho**

Facility ID 031-00027

Final

June 17, 2014
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Senior Air Quality Engineer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01. et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AAC	acceptable ambient concentrations
AACC	acceptable ambient concentrations for carcinogens
acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BMP	best management practices
Btu	British thermal units
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS No.	Chemical Abstracts Service registry number
CBP	concrete batch plant
CEMS	continuous emission monitoring systems
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring systems
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
FEC	Facility Emissions Cap
GHG	greenhouse gases
gph	gallons per hour
gpm	gallons per minute
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HHV	higher heating value
HMA	hot mix asphalt
hp	horsepower
hr/yr	hours per consecutive 12 calendar month period
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
iwg	inches of water gauge
km	kilometers
lb/hr	pounds per hour
lb/qtr	pound per quarter
m	meters
MACT	Maximum Achievable Control Technology
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards

O&M	operation and maintenance
O ₂	oxygen
PAH	polyaromatic hydrocarbons
PC	permit condition
PCB	polychlorinated biphenyl
PERF	Portable Equipment Relocation Form
PM	particulate matter
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
POM	polycyclic organic matter
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit
PTE	potential to emit
PW	process weight rate
RAP	recycled asphalt pavement
RFO	reprocessed fuel oil
RICE	reciprocating internal combustion engines
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
scf	standard cubic feet
SCL	significant contribution limits
short-term	emission estimate or emission limit with an averaging period of 24 hours or less
SIP	State Implementation Plan
SM	synthetic minor
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
TEQ	toxicity equivalent
T-RACT	Toxic Air Pollutant Reasonably Available Control Technology
ULSD	ultra-low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compounds
4SRB	4-stroke rich burn
µg/m ³	micrograms per cubic meter

FACILITY INFORMATION

Description

This facility is a natural gas pipeline compressor station, consisting of two turbines and an emergency generator.

The Solar Taurus T-10302S turbine is rated at 10,310 hp (ISO). The Solar Taurus T-7300S turbine is rated 7,150 hp (ISO). These turbines provide mechanical power to compressors that transmit natural gas along a pipeline system.

The Caterpillar G-3412 generator set is rated at 669 hp and will be operated as an emergency generator. The primary purpose of the generator is to generate electricity for the compressor station in the event of a power interruption.

Permitting History

The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

Issue Date	Permit Number	Project	Status	History Explanation
January 3, 2001	P-9506-080-1 (031-00027)	Initial Tier I permit for an existing compressor station.	S	Initial Title V permit. Revised by P-010433.
March 15, 2002	P-010433 (031-00027)	Initial PTC replacement turbines (4) and emergency generator (1), and to limit facility below major source thresholds (proposed emissions units were not constructed).	S	Replaced by P-010433A. (Initial T1 preceded this PTC.)
April 3, 2002	P-010433A (031-00027)	Revision to change emergency generator from diesel-fired to gas-fired (proposed emissions units were not constructed).	S	Replaced P-010433. Replaced by P-020413.
March 6, 2003	T1-020422 (031-00027)	Administrative amendment to revise contact information.	T	Revised P-9506-080-1. Terminated on May 4, 2004; no longer a Tier I facility.
May 2, 2003	P-020413	Initial PTC replacement turbines (2) and emergency generator (1)	S	Replaced P-010433A. Replaced by P-020412.
October 15, 2003	P-020412	Revision to change monitoring requirements for emergency generator.	S	Replaced P-020413. Replaced by P-030412.
November 10, 2003	P-030412	Revision to correct a typographical error (in permit number).	S	Replaced P-020412. Replaced by P-2011.0011 PROJ 60708.
December 14, 2007	O-2007.0214	Permit transfer of P-030412 for permittee name change.	n/a	Associated with P-030412.
March 1, 2011	P-P-2011.0011 PROJ 60708	Revision to increase permitted emission limits and change fuel sulfur content monitoring for the turbines (2).	A, will be S upon issuance of this permit	Replaced P-030412 and O-2007.0214.

Application Scope

This PTC is a revision of an existing PTC for the facility name change.

Application Chronology

May 20, 2014	DEQ received an application.
June 12, 2014	DEQ determined that the application was complete.
June 17, 2014	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

No changes are made. Refer to the statement of basis for PTC No. P-2011.0011 project 60708, issued March 1, 2011.

REGULATORY ANALYSIS

No changes are made. Refer to the statement of basis for PTC No. P-2011.0011 project 60708, issued March 1, 2011.

General Provisions of the permit are updated using the ones taken from the current template.

PUBLIC REVIEW

In accordance with IDAPA 58.01.01.208.04, a public comment period is not required when the permit revision does not result in an emissions increase.