

Statement of Basis

**Permit to Construct No. P-2014.0026
Project ID 61382**

**Koontz - Wagner
Caldwell, Idaho**

Facility ID 027-00145

Final

**January 22, 2016
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Permit Writer**

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

BHP	Break Horsepower
Btu	British thermal units
CAA	Clean Air Act
CFR	Code of Federal Regulations
CI	compression ignition
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
DEQ	Department of Environmental Quality
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
GACT	Generally Available Control Technology
GHG	greenhouse gases
HAP	hazardous air pollutants
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
km	kilometers
lb/hr	pounds per hour
m	meters
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
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
PAH	polyaromatic hydrocarbons
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
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
RICE	reciprocating internal combustion engines
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
SCL	significant contribution limits
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/yr	tons per consecutive 12 calendar month period
TAP	toxic air pollutants
U.S.C.	United States Code
VOC	volatile organic compounds
µg/m ³	micrograms per cubic meter

FACILITY INFORMATION

Description

Koontz-Wagner manufactures packaged electrical equipment, generator enclosures and tanks for the power, oil and gas, industrial, mining, water, and renewable energy markets. The facility receives carbon steel, galvanized steel, ancillary parts, electrical components, paints, thinners, welding supplies and equipment support chemicals (e.g. cutting fluids, oils and lubricants). Machining is conducted through the use of shears, breaks, a plasma cutter table, portable plasma cutter, forming machines, and one drill press. Assembly of products is conducted before and after painting operations. Assembly includes adding connections and components. Welding occurs through one of approximately 20 welding stations in the main building. Electrical integration occurs on the approximately 24,000 square foot rectangular shaped concrete pad located along the western property boundary.

Prior to painting, the frames for the manufactured product are sand blasted within the blasting shed. Painting operations include application of primer coat, subsequent assembly operations (if necessary), followed by the application of the remaining coats. Painting operations are conducted through the use of air-less spray guns within the paint booth, which is equipped with filtered exhaust vents. The paint booth is heated by a small natural gas fired heater. Paints are mixed in a dedicated paint mixing room located in the northern portion of the paint drying building. Products are then moved to the paint drying building where the product is left to dry through the use of fans and the heated floors (heated through the use of natural gas fired boiler). If necessary, minor touch up painting operations, using handheld spray guns, are performed in the paint drying booth.

Koontz-Wagner conducts the following activities in support of the major operations:

- General building and machinery/equipment maintenance.
- Operation of a diesel powered emergency generator.
- On-site dust suppression activities through the use of water spray application.
- Operation of a 50 gallon gasoline tank and diesel fuel dispensing unit.
- Manufactures aerosol spray cans included as part of a touch-up kit provided to customers.
- Transfer of raw materials and finished products using five propane-powered forklifts, five diesel-powered forklifts, one diesel-powered crane, one diesel-powered bridge crane, and two diesel-fueled pickup trucks.

Permitting History

This is the initial PTC for an existing operating facility thus there is no permitting history.

Koontz-Wager purchased the facility on July 9, 2013. The facility has been in operation since 2002. As the new owners, Koontz-Wagner submitted an initial permit to construct application for the facility.

Application Scope

This permit is the initial PTC for this facility. The applicant has proposed to seek authorization to operate a facility primarily engaged in manufacturing of prefabricated metal buildings and components manufacturing¹. The facility also manufactures steel tanks.

Activities at the facility include welding operations, abrasive blasting, painting, plasma cutting, an emergency diesel generator, boiler, a heater and gasoline storage tank.

¹ SIC Code 3448, NAICS Code 332311

Application Chronology

July 9, 2013	Koontz-Wagner purchased an existing facility
May 23, 2014	DEQ received an application.
May 27, 2014	DEQ received the permit to construct application fee.
June 3 – 18, 2014	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
June 26, 2014	DEQ determined that the application was incomplete.
August 18, 2014	DEQ received supplemental information from the applicant.
October 9, 2014	DEQ determined that the application was incomplete.
November 14, 2014	DEQ received supplemental information from the applicant.
December 10, 2014	DEQ determined that the application was complete.
May 19, 2015	DEQ informed the applicant that there were technical issues with the air pollution dispersion model.
September 8, 2015	DEQ received an updated air pollution dispersion modeling demonstration.
September 11, 2015	DEQ received an updated emission inventory
November 30, 2015	DEQ made available the draft permit and statement of basis for peer and regional office review.
December 4, 2015	DEQ made available the draft permit and statement of basis for applicant review.
January 20, 2016	DEQ received the permit processing fee.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

Source	Control Equipment
Heater – 0.288 MMBtu/hr Natural Gas Fired	None
Boiler – 0.15 MMBtu/hr Natural Gas Fired	None
Welding Operations – various equipment	3 or more sided enclosure
Abrasive Blasting Operations	3 or more sided enclosure
Plasma Cutting Operations	3 or more sided enclosure
Spray Painting Operations	Booths with filters
Diesel Generator – 755 BHP Manufacturer – Cummins Power Emergency Power Only Tier 2 Certified	None
Gasoline Dispensing Tank Capacity – 50 gallons	Comply with NSPS

Emissions Inventories

Potential to Emit

IDAPA 58.01.01 defines Potential to Emit as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary emissions do not count in determining the potential to emit of a facility or stationary source.

Uncontrolled Potential to Emit

Using the definition of Potential to Emit, uncontrolled Potential to Emit is then defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall not be treated as part of its design since the limitation or the effect it would have on emissions is not state or federally enforceable.

The uncontrolled Potential to Emit is used to determine if a facility is a “Synthetic Minor” source of emissions. Synthetic Minor sources are facilities that have an uncontrolled Potential to Emit for regulated air pollutants or HAP above the applicable Major Source threshold without permit limits.

The following table presents the uncontrolled Potential to Emit for criteria air pollutants and carbon dioxide equivalent emissions as determined by DEQ staff using the applicant’s calculations but removing emissions reductions attributed to air pollution control devices and by increasing painting operations to the presumed maximum potential operations equivalent to 8,760 hours per year instead of 2,730 hours per year (that is, painting emissions were increased by a factor of 3.2).

Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC	CO _{2e}
Source	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources							
Generator	0.012	0.012	5E-4	0.4	0.22	0.03	43
Boiler	0.005	0.005	4E-4	0.064	0.054	4E-3	77
Heater	9.4E-3	9.4E-3	7.42E-4	0.124	0.104	6.8E-3	148
Welding	0.03	0.03	-	-	-	-	-
Blasting	1.96	0.20	-	-	-	-	-
Plasma Cutting	2.5E-3	2.5E-3	-	-	-	-	-
Painting	2.75	0.98	-	-	-	65.49	-
Total, Point Sources	4.77	1.24	0.002	0.59	0.38	65.53	267.7

Pre-Project Potential to Emit

Pre-project Potential to Emit is used to establish the change in emissions at a facility as a result of this project.

This is an existing facility. However, since this is the first time the facility is receiving a permit, pre-project emissions are set to zero for all criteria pollutants.

Post Project/Controlled Potential to Emit

Post project Potential to Emit is used to establish the change in emissions at a facility and to determine the facility's classification as a result of this project. Post project Potential to Emit includes all permit limits resulting from this project.

The following table presents the post project Potential to Emit for criteria and carbon dioxide equivalent pollutants from all emissions units at the facility as determined by the applicant and reviewed by DEQ staff. See [Appendix A](#) Appendix A for a summary of the emission inventory spreadsheet provided in the application for each emissions unit.

Table 3 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC	CO _{2e}
Source	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources							
Generator	0.012	0.012	5E-4	0.4	0.22	0.03	43
Boiler	0.005	0.005	4E-4	0.064	0.054	4E-3	77
Heater	9.4E-3	9.4E-3	7.42E-4	0.124	0.104	6.8E-3	148
Welding	0.01	0.01	-	-	-	-	-
Blasting	0.59	0.06	-	-	-	-	-
Plasma Cutting	1.6E-3	1.6E-3	-	-	-	-	-
Painting	0.86	0.31	-	-	-	20.52	-
Total, Point Sources	1.49	0.40	0.002	0.59	0.38	20.56	267.7

- a) Controlled average emission rate in pounds per hour is a daily average, based on the proposed daily operating schedule and daily limits.
b) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

TAP Emissions

The permit limits daily toxic air pollutant emissions so they do not exceed the EL (lb/hr) multiplied by 24 (for TAPs listed in both IDAPA 58.01.01.585 and 586), or limits emissions such that they do not exceed the acceptable ambient concentration (mg/m³) (for TAPs listed in IDAPA 58.01.01.585) and the acceptable ambient concentration for carcinogens (µg/m³) (for TAPs listed in IDAPA 58.01.01.586).

The permit requires keeping records of emissions daily and annually, reporting whenever a modeling exercise is conducted to show that impacts are below acceptable ambient concentrations.

These permit conditions are consistent with permit conditions that have been issued to Charmac Trailers² and Guerdon Enterprises³. The applicant requested that they be issued these types of permit conditions.

Koontz –Wagner’s application includes an emission inventory for the suite of paints and solvents listed in the application. The only TAP that exceeded screening emissions levels was naphthalene. Koontz-Wagner has modeled the emission rates of naphthalene (7.52E-4 lb/hr) and determined that ambient impacts are below the acceptable concentrations listed in Section 585 and 586 of the Rules. The permit requires that Koontz-Wagner estimate emissions of TAPs each day. If emissions exceed the screening emissions levels they shall conduct a modeling analysis to assure compliance with acceptable ambient concentrations. If modeling is conducted, an annual report shall be submitted to DEQ by May 1st of each year.

HAP Emissions

Facility-wide HAP emissions are limited by the permit to be less than 10 tons per any consecutive 12 month period for any individual HAP, and to less than 25 tons per any consecutive 12 month period for all HAPs combined. The facility shall keep records and demonstrate monthly that emissions are below these limits.

The facility’s initial potential to emit calculations provided that xylene emissions were above the HAP 10 ton per year major facility threshold (10.5 tons per year during 2,730 hour of operation). However, Koontz-Wagner updated the application to reflect that the facility does not currently use xylene for cleanup operations. Without using xylene for cleanup, potential xylene emissions were then reported to be below 10 tons per year (7.47 tons per year).

Actual emissions of xylene from the previous owner during 2012, while using xylene for cleanup, are reported to be 8.2 tons per year during 2,730 hours of operation. In determining the uncontrolled potential to emit DEQ presumes that the Koontz-Wagner could operate at least 3,330 hours per year while using xylene for cleaning as they had in the past⁴. This would result in potential xylene emissions greater than or equal to 10 tons per year. Therefore a permit limit is necessary to limit HAP emissions below major facility thresholds.

All emission inventories provided by Koontz-Wagner are based on 2012 actual emission data indicating the facility’s basic purpose and operations remain the same after they purchased the plant on July, 9, 2013. The only notable exception is that current operations do not use xylene for cleanup (however they state that they had used it under their ownership for a period of approximately 4 months while the facility investigated replacement products).

Ambient Air Quality Impact Analyses

DEQ’s modeling guidance includes that if criteria air pollutant emissions are below regulatory concern (less than 10% of what is defined as significant) then modeling of those pollutants is not required. The only criteria pollutant emitted above this threshold is VOC at 20.56 tons per year. VOC emissions are not required to be modeled at this emission rate, and since no other criteria pollutant exceeds 10% of what is defined as significant modeling is not required for criteria pollutants.

The applicant has also demonstrated to DEQ’s satisfaction that the emissions increase due to this permitting action will not exceed any acceptable ambient concentration (AAC) or acceptable ambient concentration for carcinogens (AACC) for toxic air pollutants (TAP). An ambient air quality impact analyses document has been crafted by DEQ based on a review of the modeling analysis submitted in the application. That document is part of the final permit package for this permitting action (see Appendix B).

2 Charmac Trailers, PTC P-2009.0095 issued January 6, 2010

3 Guerdon Enterprises, LLC, PTC P-201.0018 issued September 2, 2014

4 After purchasing the facility, Koontz-Wagner states they used xylene for cleaning but currently they don’t. Consequently the uncontrolled potential to emit reflects the use of xylene for cleaning even though the facility does not currently use it for that purpose.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Canyon County, which is designated as attainment or unclassifiable for PM₁₀, PM_{2.5}, SO₂, NO₂, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Facility Classification

The AIRS/AFS facility classification codes are as follows:

For THAPs (Total Hazardous Air Pollutants) Only:

- A = Use when any one HAP has actual or potential emissions ≥ 10 T/yr or if the aggregate of all HAPS (Total HAPs) has actual or potential emissions ≥ 25 T/yr.
- SM80 = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the permit sets limits ≥ 8 T/yr of a single HAP or ≥ 20 T/yr of THAP.
- SM = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the potential HAP emissions are limited to < 8 T/yr of a single HAP and/or < 20 T/yr of THAP.
- B = Use when the potential to emit without permit restrictions is below the 10 and 25 T/yr major source threshold
- UNK = Class is unknown

For All Other Pollutants:

- A = Actual or potential emissions of a pollutant are ≥ 100 T/yr.
- SM80 = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are ≥ 80 T/yr.
- SM = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are < 80 T/yr.
- B = Actual and potential emissions are < 100 T/yr without permit restrictions.
- UNK = Class is unknown.

Table 4 Regulated Air Pollutant Facility Classification

Pollutant	Uncontrolled PTE (T/yr)	PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM	< 100	2.21	100	B
PM ₁₀ /PM _{2.5}	< 100	1.49/0.4	100	B
SO ₂	<100	2E-3	100	B
NO _x	<100	0.6	100	B
CO	<100	0.38	100	B
VOC	<100	20.52	100	B
HAP (single)	>10	<10	10	SM80
HAP (Total)	>25	<25	25	SM80

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 Permit to Construct Required

The permittee has requested that a PTC be issued to the facility for the existing and operating source. Since the source has demonstrated to DEQ’s satisfaction that it would comply with state and federal standards a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400–410 were not applicable to this permitting action.

Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

Post project facility-wide permitted emissions from this facility do not have a potential to emit greater than 100 tons per year for criteria pollutants, or 10 tons per year for any one HAP or 25 tons per year for all HAP combined. Therefore, as permitted, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006.122.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

NSPS Applicability (40 CFR 60)

**40 CFR 60, Subpart Dc Standards of Performance for Small Industrial–
Commercial–Institutional Steam Generating Units**

§ 60.40c Applicability

Section (a) specifies that except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). Koontz-Wagner’s boiler is rated at 0.15 MMBtu/hr which is less than the applicability threshold and this standard does not apply.

NESHAP Applicability (40 CFR 61)

The facility is not subject to any NESHAP requirements in 40 CFR 61.

MACT/GACT Applicability (40 CFR 63)

The facility has proposed to operate as a minor source of hazardous air pollutant (HAP) emissions, and is subject to the generally available control technology (GACT) requirements of 40 CFR 63, Subpart ZZZZ and Subpart CCCCCC.

**40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants:
Reciprocating Internal Combustion Engines**

The facility operates a diesel fired 755 Bhp emergency generator and is subject to this subpart. A detailed regulatory breakdown is provided in Appendix C. A summary of the substantive applicable requirements is provided below as they appear in the permit.

In accordance with 40 CFR 63.6603(a), on and after May 3, 2013, the following emission limits or operating restrictions are required for the stationary emergency CI RICE. The permittee must meet the following requirements, except during periods of startup.

- Change oil and filter every 500 hours of operation or annually, whichever comes first.
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

In accordance with 40 CFR 63.6605, the permittee shall, at all times, operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

In accordance with 63.6625(f) the permittee must install a non-resettable hour meter if one is not already installed.

In accordance with 40 CFR 63.6625(h), time spent at idle during startup shall be minimized to a period needed for appropriate and safe loading of the engine, but not to exceed 30 minutes.

In accordance with 40 CFR 63.6625(i), the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in the Standard Summary permit.

In accordance with 40 CFR 63.6640(f), in order to be considered an emergency generator the permittee shall operate the emergency engine as follows:

1. There is no time limit on the use of emergency stationary RICE in emergency situations.

2. The permittee may operate the stationary emergency RICE for the purposes of maintenance checks and readiness testing, provided the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the stationary emergency RICE. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
3. The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hour per year provided for maintenance and testing.

In accordance with 40 CFR 63.6655(e), the permittee must keep records of the maintenance conducted on the engine in order to demonstrate that the permittee operated and maintained the engine and after-treatment control device (if any) according to the maintenance plan.

In accordance with 40 CFR 63.6655(f), an existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the stationary emergency RICE that is recorded through the non-resettable hour meter.

All records shall be readily accessible in hard copy or electronic form for a minimum of five (5) years after the date of each occurrence, measurement, maintenance procedure, corrective action or report in accordance with 40 CFR 63.6660.

**40 CFR 63, Subpart CCCCCC..... National Emission Standards for Hazardous Air Pollutants:
Gasoline Dispensing Facilities**

The facility operates a 50 gallon gasoline tank and dispensing equipment. Monthly throughput is less than 10,000 gallons. A detailed regulatory breakdown is provided in Appendix D. A summary of the substantive applicable requirements are summarized below as they appear in the permit.

In accordance with 40 CFR 63.1116(a) if monthly gasoline throughput is less than 10,000 gallons the permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended period of time. Measures to be taken include, but are not limited to, the following:

- 1) Minimize gasoline spills;
- 2) Clean up spills as expeditiously as practicable;
- 3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with this section; and
- 4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

In accordance with 40 CFR 63.1115(a), the permittee must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

In accordance with 40 CFR 63.1111(e), the permittee shall monitor and record monthly throughput of gasoline from the gasoline storage tank. Records required under this paragraph shall be kept for a period of five years.

In accordance with 40 CFR 63.1125(d), the Permittee shall keep records as specified below:

- Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

- Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

In accordance with 40 CFR 63.11126(b), the permittee shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded.

40 CFR 63, Subpart XXXXXX..... National Emission Standards for Nine Metal Fabrication and Finishing Source Categories

§63.11514 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an area source that is primarily engaged in the operations in one of the nine source categories listed in paragraphs (a)(1) through (9) of this section. Descriptions of these source categories are shown in Table 1 of this subpart. “Primarily engaged” is defined in §63.11522, “What definitions apply to this subpart?”

- (1) Electrical and Electronic Equipment Finishing Operations;
- (2) Fabricated Metal Products;
- (3) Fabricated Plate Work (Boiler Shops);
- (4) Fabricated Structural Metal Manufacturing;
- (5) Heating Equipment, except Electric;
- (6) Industrial Machinery and Equipment Finishing Operations;
- (7) Iron and Steel Forging;
- (8) Primary Metal Products Manufacturing; and
- (9) Valves and Pipe Fittings.

As permitted, Koontz- Wagner is an area source of HAP, however according to the application it is not primarily engaged in one of the nine listed categories. The Koontz-Wagner Caldwell facility designs and manufactures packaged electrical equipment, generator enclosures and tanks for the power, oil and gas, industrial, mining, water, and renewable energy markets. The facility conducts operations identified by the primary SIC code is 3448, Prefabricated Metal Buildings and Components. The corresponding NAICS code is 332311, Prefabricated Metal Building and Component Manufacturing.

EPA has published applicability guidance in a “Questions & Answers”⁵ format. In this guidance EPA states that in order to be an affected source the facility must be primarily engaged in the specifically listed SIC and NAICS codes. Both SIC and NAICS codes must apply in order to meet the applicability criteria. That EPA list of codes is provided below.

5 http://www.epa.gov/ttn/atw/6x/metal_fabrication_q_a_nov-2011-rev3.pdf

	EPA Source Category	SIC Code Description	SIC Code	NAICS Code	NAICS Description
1	Electrical & Electronic Equipment Finishing Ops	Motors and Generators Manufacturing	3621	335312	Motor and Generator Manufacturing
		Electrical Machinery, Equipment, & Supplies, NEC	3699	335999	All Other Misc. Electrical Equipment & Component Mftg
2	Fabricated Metal Products, NEC	Fabricated Metal Products, NEC	3499	332117	Powder Metallurgy Part Manufacturing
		Fabricated Metal Products, NEC	3499	332999	All Other Miscellaneous Fabricated Metal Product Mftg
3	Fabricated Plate Work (Boiler Shops)	Fabricated Plate Work and Boiler Shops	3443	332313	Plate Work Manufacturing
		Fabricated Plate Work and Boiler Shops	3443	332410	Power Boiler and Heat Exchanger Manufacturing
		Fabricated Plate Work and Boiler Shops	3443	332420	Metal Tank (Heavy Gauge) Manufacturing
4	Fabricated Structural Metal Manufacturing	Fabricated Structural Metal Fabrication	3441	332312	Fabricated Structural Metal Manufacturing
5	Heating Equipment, except electric	Heating Equipment, except electric	3433	333414	Heating Equipment (except Warm Air Furnaces) Mftg
6	Industrial Machinery & Equipment: Finishing Ops	Construction Machinery Manufacturing	3531	333120	Construction Machinery Manufacturing
		Oil and Gas Field Machinery Equipment Mftng	3533	333132	Oil and Gas Field Machinery and Equipment Mftg
		Pumps and Pumping Equipment Mftng	3561	333911	Pump and Pumping Equipment Manufacturing
7	Iron and Steel Forging	Iron and Steel Forging	3462	332111	Iron and Steel Forging
8	Primary Metals Products Manufacturing	Primary Metals Products Manufacturing	3399	332618	Other Fabricated Wire Product Manufacturing
9	Valves and Pipe Fittings, NEC	Valves and Pipe Fittings, NEC	3494	332919	Other Metal Valve and Pipe Fitting Manufacturing

As previously described, Koontz Wagner has certified that it is primarily engaged in SIC code 3448 and NAICS code 332311. Neither of these codes is specifically listed and the source is not an affected facility.

Permit Conditions Review

This section describes the permit conditions for this initial.

Permit Condition 1.1

This condition describes the permits scope. Koontz-Wagner is an existing and operating source. Koontz-Wagner purchased the facility on July 9, 2013. The facility has been in operation since 2002. As the new owners, Koontz-Wagner submitted an application for an initial permit to construct (PTC) an existing, operating prefabricated metal buildings and components manufacturing operations. The facility also manufactures steel tanks. Operations include metal working, welding and painting. The facility receives various forms of steel, and machines the steel into tanks and enclosures.

Table 1.1

Table 1.1 lists the emission units at the facility along with any associated air pollution control equipment.

Permit Condition 2.1

This permit condition describes the manufacturing operations at the facility.

Section 2 of the permit limits toxic air pollutant and hazardous air pollutant emissions.

Permit Condition 2.2

This permit condition describes the air pollution equipment operated at the source.

Permit Condition 2.3

This permit condition limits daily TAP emissions rates to below the screening emission level multiplied by 24 for TAPs listed in Section 585 and for the TAPs listed in Section 586 of the rules, or below the emission rate that would cause an ambient impact to exceed the acceptable ambient concentration for that TAP. Daily emissions of equal to or less than the EL times 24 assures that maximum 24-hour average emissions rates are below the EL for TAPs listed in Section 585 and 586 of the Rules. If daily emissions exceed the EL times 24 then the facility shall model emission rates to determine ambient impacts. Under this permit condition TAP ambient impacts are limited from the facility to be less than the acceptable ambient concentration. The permit does allow the use of new paints and solvents provided those changes result in emissions that comply with the above described permit conditions.

Requiring modeling to assure compliance with acceptable ambient concentrations is consistent with the toxic air pollutant exemption criteria listed in Section 223.02.b⁶ of the Rules and consistent with the precedent set by the Charmac Permit to Construct (P-2009.0095) that was issued on January 6, 2010 and the Guerdon Enterprises Permit to Construct (P-2014.0018) that was issued September 2, 2014.

⁶ The toxic air pollutant exemption criteria are not applicable to this permit condition but it is relevant in the sense that this permit condition requires similar reporting requirements when air pollution dispersion modeling is conducted.

Permit Condition 2.4

Hazardous Air Pollutant (HAP) emissions are limited below major facility thresholds.

Permit Condition 2.5

Particulate matter emissions from welding, abrasive blasting, and plasma cutting operations shall be controlled by operating in a 3 or more sided enclosure. This is consistent with the emission inventory provided in the application.

Permit Condition 2.6

Particulate matter emissions from all spray painting operations are controlled by conducting operations within booths equipped with filters guaranteed by the manufacture to remove at least 95.56% of the particulate matter emitted from spray painting operations. This is consistent with the emission inventory provided in the application.

Permit Condition 2.7

The permittee shall not use more than 302 tons of abrasive for abrasive blasting operations per any 12 consecutive months and that material shall be Barton Garnet Abrasive Grains and Powders – Almandine and Pyrope Garnet or an alternative material provided the use of that alternative qualifies and complies with the permit to construct exemption criteria at IDAPA 58.01.01.220 – 223. This is consistent with the emission inventory provided in the application.

This limit along with operating requirements for the welding, plasma cutting and painting operations serve to limit annual criteria air pollutant emissions below the air pollution modeling thresholds, which is 10% of what is defined as significant or below 1.5 tons per year of PM₁₀ and 1.0 tons per year of PM_{2.5}. Throughput or usage rate limits are only included in the permit for blasting operations and painting operations. Welding and plasma cutting operations combined account for a small percentage of facility wide emissions and it has been determined that throughput or usage limits for welding and plasma cuttings operations are not warranted.

Permit Condition 2.8

Specifies that the permittee shall not use more than 22,000 gallons of paint in any 12 consecutive calendar months. This is consistent with the emission inventory provided in the application. This condition serves to limit VOC emissions and particulate matter emissions. VOC emissions are limited to below the major facility threshold of 100 tons per year and particulate matter emissions are limited below the modeling threshold discussed in the modeling section of this statement of basis. For the suite of paints included in the application VOC emissions are estimated to be 20.5 tons per year. PM₁₀ emissions from painting operations are estimated to be 0.86 tons per year and when combined with all other sources of emissions at the facility are less than the 1.5 ton per year modeling threshold. PM_{2.5} emissions from painting operations are estimated to be 0.31 tons per year and when combined with all other sources of emissions at the facility are less than the 1.0 ton per year modeling threshold.

Permit Condition 2.9

This permit condition requires keeping records of the daily usage of HAP and TAP containing materials that emit air pollution. This information will be used to estimate emissions as required by Permit Condition 2.10 and 2.11.

Permit Condition 2.10

This permit condition requires the permittee to calculate and record TAP emissions each day. If the daily emissions (pounds per calendar day) exceed the TAP screening emissions multiplied by 24 then the source must model to determine ambient impacts. In accordance with the general provisions all emissions calculations shall remain on-site. If modeling is conducted a report must be submitted to DEQ by May 1 each year as required by Permit Condition 2.13.

Permit Condition 2.11

Using the material usage records required to be kept the permittee shall calculate HAP emission rates. Each month the permittee shall determine the HAP emissions that occurred during the previous 12 consecutive months. The permittee shall determine the emissions of each individual HAP and the total of all HAP emissions combined. As discussed in the HAP Emissions section of this statement of basis, the facility has the potential to emit HAP at rates greater than the major facility thresholds and monitoring to assure emissions do not exceed major facility thresholds is warranted. In accordance with the general provisions all emissions calculations shall remain on-site.

Permit Condition 2.12

Consistent with the emission calculations provided in the application all particulate matter emissions from spray painting operations shall be controlled by a filter certified by the manufacturer to remove 95.56% or greater of the particulate matter emitted from spray painting operations.

Permit Condition 2.13

Each year the permittee shall submit a report by May 1st on all TAP modeling analyses that have been conducted during the previous 12 month period. The report shall include all modeling files and emissions calculations.

Permit Condition 2.14

This permit condition serves to remind the source that it has an obligation to submit an excess emissions report should modeling show that an acceptable ambient concentration for any TAP was violated.

Permit Condition 3.1

Provides a process description for the diesel powered 755 Hp emergency generator. The applicant provided that the engine is only operated under conditions that qualify it as an emergency engine under the provisions of 40 CFR 63 Subpart ZZZZ.

The sole purpose of Section 3 of the permit is to include the provisions of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ. Should there be a conflict between these permit conditions and the CFR, the CFR shall govern. A detailed analysis of this regulation is provided in Appendix C.

Permit Condition 4.1

Provides a process description of the 50 gallon gasoline storage tank and dispensing system. The facility has indicated that the gasoline throughput of the system is less than 10,000 gallons per month and the 40 CFR 63 Subpart CCCCCC requirements for that throughput have been included in the permit. It is highly unlikely that the gasoline throughput will exceed 10,000 gallons per month (each day of the month the tank would need to be emptied over 6 times to exceed the 10,000 gallon threshold).

The sole purpose of Section 4 of the permit is to include the provisions of the National Emissions Standards for Hazardous Air Pollutants for Gasoline Dispensing, 40 CFR 63, Subpart CCCCCC. Should there be a conflict between these permit conditions and the CFR, the CFR shall govern. A detailed analysis of this regulation is provided in Appendix D.

Initial Permit Condition 5.1

The duty to comply general compliance provision requires that the permittee comply with all of the permit terms and conditions pursuant to Idaho Code §39-101.

Initial Permit Condition 5.2

The maintenance and operation general compliance provision requires that the permittee maintain and operate all treatment and control facilities at the facility in accordance with IDAPA 58.01.01.211.

Initial Permit Condition 5.3

The obligation to comply general compliance provision specifies that no permit condition is intended to relieve or exempt the permittee from compliance with applicable state and federal requirements, in accordance with IDAPA 58.01.01.212.01.

Initial Permit Condition 5.4

The inspection and entry provision requires that the permittee allow DEQ inspection and entry pursuant to Idaho Code §39-108.

Initial Permit Condition 5.5

The permit expiration construction and operation provision specifies that the permit expires if construction has not begun within two years of permit issuance or if construction has been suspended for a year in accordance with IDAPA 58.01.01.211.02.

Initial Permit Condition 5.6

The notification of construction and operation provision requires that the permittee notify DEQ of the dates of construction and operation, in accordance with IDAPA 58.01.01.211.03.

Initial Permit Condition 5.7

The performance testing notification of intent provision requires that the permittee notify DEQ at least 15 days prior to any performance test to provide DEQ the option to have an observer present, in accordance with IDAPA 58.01.01.157.03.

Initial Permit Condition 5.8

The performance test protocol provision requires that any performance testing be conducted in accordance with the procedures of IDAPA 58.01.01.157, and encourages the permittee to submit a protocol to DEQ for approval prior to testing.

Initial Permit Condition 5.9

The performance test report provision requires that the permittee report any performance test results to DEQ within 60 days of completion, in accordance with IDAPA 58.01.01.157.04-05.

Initial Permit Condition 5.10

The monitoring and recordkeeping provision requires that the permittee maintain sufficient records to ensure compliance with permit conditions, in accordance with IDAPA 58.01.01.211.

Initial Permit Condition 5.11

The excess emissions provision requires that the permittee follow the procedures required for excess emissions events, in accordance with IDAPA 58.01.01.130-136.

Initial Permit Condition 5.12

The certification provision requires that a responsible official certify all documents submitted to DEQ, in accordance with IDAPA 58.01.01.123.

Initial Permit Condition 5.13

The false statement provision requires that no person make false statements, representations, or certifications, in accordance with IDAPA 58.01.01.125.

Initial Permit Condition 5.14

The tampering provision requires that no person render inaccurate any required monitoring device or method, in accordance with IDAPA 58.01.01.126.

Initial Permit Condition 5.15

The transferability provision specifies that this permit to construct is transferable, in accordance with the procedures of IDAPA 58.01.01.209.06.

Initial Permit Condition 5.16

The severability provision specifies that permit conditions are severable, in accordance with IDAPA 58.01.01.211.

PUBLIC REVIEW

Public Comment Opportunity

An opportunity for public comment period on the application was provided in accordance with IDAPA 58.01.01.209.01.c or IDAPA 58.01.01.404.01.c. During this time, there were no comments on the application and there was not a request for a public comment period on DEQ's proposed action. Refer to the chronology for public comment opportunity dates.

APPENDIX A – EMISSIONS INVENTORIES

APPENDIX B – AMBIENT AIR QUALITY IMPACT ANALYSES

**APPENDIX C – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR
POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES**

**APPENDIX D – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR
POLLUTANTS FOR STATIONARY GASOLINE DISPENSING**

APPENDIX E – PROCESSING FEE