

# **Statement of Basis**

**Permit to Construct No. P-2008.0191  
Project ID 61631**

**K&T Steel Corporation  
Twin Falls, Idaho**

**Facility ID 083-00087**

**Final**

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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
C.E.	control efficiency
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 <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> 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 <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides

NSPS	New Source Performance Standards
O&M	operation and maintenance
O <sub>2</sub>	oxygen
PAH	polyaromatic hydrocarbons
PC	permit condition
PCB	polychlorinated biphenyl
PERF	Portable Equipment Relocation Form
PM	particulate matter
PM <sub>2.5</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM <sub>10</sub>	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
SDS	Safety Data Sheet
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 <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	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
yd <sup>3</sup>	cubic yards
µg/m <sup>3</sup>	micrograms per cubic meter

## **FACILITY INFORMATION**

### ***Description***

The K&T Steel Corporation (K&T) facility in Twin Falls engages in rebar cutting and bending, structural steel fabrication, and the manufacture of steel tanks for above-ground storage. Normal operation at K&T consists of two 8-hour shifts per day, five days per week on average, with additional time as necessary.

The K&T facility is composed of six major buildings: the main office building; the manufacturing shop; the auxiliary building (formerly the plasteel coating building); the paint building; the grit blasting building; and a material storage building.

The annual production capacity is 3,000 tons per year (T/yr) for the rebar process, 3,000 T/yr for the structural steel process, and the annual storage capacity for all fabricated tanks is 2,000,000 gallons.

### **Rebar Cutting and Bending**

The rebar fabrication operation is carried out in the manufacturing shop building, where rebar is mechanically chopped into sections of different lengths and then bent. No air emissions result from this operation.

### **Structural Steel Fabrication**

The structural steel fabrication operation is the primary operation conducted at the facility. Structural steel operations are completely contained in the manufacturing shop building. In this operation, a variety of structural steel shapes are made from a wide selection of steel shape base types that K&T stocks. Some cutting and welding of steel occurs with the emissions from these processes occurring within the building. In addition, welding emissions are not captured with hoods or special ventilation.

Air in the manufacturing shop building is heated by fifteen natural gas-fired space heaters with heat inputs of 0.040 MMBtu each. The manufacturing shop building has no doors or openings on the north side of the building, but has large bi-fold doors on the east side of the building where fabricated structural steel and steel tanks are transported to the steel grit blast building or paint building. Emissions from inside the building will be released only when these doors are open. Filters are installed in the ceiling fan hoods.

### **Steel Tank Fabrication**

K & T Steel manufactures tanks from 500 to 30,000 gallons in capacity. Most of these tanks are between 10,000 and 20,000 gallons in capacity. The tank fabrication process begins in the manufacturing shop where steel plates are rolled into cylindrical shapes and welded together. The tank ends or "heads" are also cut and welded in this building. Fittings are added to each tank and the welds are checked by air pressure testing. The steel tank fabricating processing continues in the steel grit blast building and the paint building.

### **Plasma Arc Cutting Operation**

In April 2014, K & T Steel installed a plasma cutting system in the Auxiliary Building (formerly the Plasteel Building). Along with the plasma cutter, a baghouse was installed to reduce emissions from the plasma cutter. The baghouse is located outside the Auxiliary Building, but it exhausts inside the building.

The plasma cutter is used to manufacture plate parts for structural steel and tanks. Approximately 95 to 98 percent of the total steel cut with the plasma cutter is mild carbon steel, and the remainder is stainless steel. No aluminum is cut by the plasma cutter. Use of the plasma cutter is highly variable; some days it is not used at all, and other days it is used more than 8 hours.

## **Steel Grit Blasting Operation**

After fabrication, some steel tanks and some structural steel shapes are steel grit blasted with a fine material. Grit blasting at the facility occurs five hours per day on average.

The Grit Blast Building is completely enclosed and has an exhaust system utilizing a venturi and cyclonic separator scrubber to reduce dust emissions. Emissions from the exhaust and filter system are vented through a vertical stack located in the top of the building.

## **Coating Operation**

For most tanks and some structural steel, the final step in the manufacturing process consists of painting the structural steel or tanks using primers, enamels, epoxies, or other types of coatings. A maximum of 14,512 gal/yr of paints, epoxies, primers, solvents, and other types of coatings are used in this building. Paint spraying can be conducted for a maximum of 8,760 hours per year. The maximum spray rate is possible for only a limited period because of the time required to process the steel being painted; most of the processing consists of moving the steel in and out of the paint building, turning the steel over to expose the uncoated areas, and waiting for the coating to dry.

Painting takes place in a large, enclosed, free-standing paint building provided with exhaust fans that maintain the building at a negative pressure. The exhaust system includes two identical and independent large open-face filter inlets that collect paint overspray. These exhaust to two identical and independent stacks. Air from the paint building is exhausted through two vertical stacks, each with an estimated air flow of 10,000 acfm. Air inside the paint building is heated using one natural gas-fired space heater with a heat input of 1.375 MMBtu/hr.

Tank asphalt coating may be conducted inside or outside of the paint building. A small number of tanks are coated with black asphalt using a roller. A maximum of 200 gallons of this black asphalt coating is used annually.

## **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).

November 15, 2012	P-2008.0191, Project 61061, Modified permit to construct to incorporate changes requested by the facility to allow more operating flexibility, Permit status (A, but will become S upon issuance of this permit)
May 29, 2009	P-2008.0191, Initial permit for an existing rebar fabrication, structural steel fabrication, and steel tank manufacturing facility, Permit status (S)

## **Application Scope**

This is a modification of an existing PTC.

The applicant has proposed to:

- Permit the previously installed plasma cutting operation.
- Modify the emissions controls on the steel grit blasting operation to increase the control efficiency (from 80.0% to 98.0%) and correspondingly increase the annual amount of new steel grit usage (from 32,500 lb/yr to 219,000 lb/yr) in the steel grit blasting operation.
- Decrease the control efficiency of the filters used in the coating operation (from 99.6% to 98.0%) and correspondingly decrease the hourly and annual coating usage.

## ***Application Chronology***

November 17, 2015	DEQ received an application and an application fee.
Nov. 27 – Dec. 14, 2015	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
December 16, 2015	DEQ determined that the application was incomplete.
December 22, 2015	DEQ received supplemental information from the applicant.
January 14, 2016	DEQ determined that the application was complete.
February 18, 2016	DEQ made available the draft permit and statement of basis for peer and regional office review.
February 24, 2016	DEQ made available the draft permit and statement of basis for applicant review.
March 21, 2016	DEQ received the permit processing fee.
March 31, 2016	DEQ issued the final permit and statement of basis.

# TECHNICAL ANALYSIS

## Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

Source ID No.	Sources	Control Equipment	Emission Point ID No.
Manufacturing Shop Building/Structural Steel Fabrication, and Steel Tank Fabrication	<p><u>Structural Steel Welding:</u> Welding Wire Consumption: 50,000 lb/yr</p> <p><u>Space Heaters:</u> Quantity: 15 Heat Input Rating: 0.040 MMBtu/hr Fuel: natural gas only</p>	Particulate filters on ceiling fans	Modeled as a Volume Source Release Height: 10 ft Exit Velocity: 0.001 m/sec
Plasma Cutting Operations	<p><u>Plasma Cutter:</u> Manufacturer: Hypertherm Hyperperformance Model: HPR260XD Manufacture Date: 2014 Max. Capacity: 575 in<sup>3</sup>/hr</p>	<p><u>Plasma Cutter Baghouse:</u> Manufacturer: Camfil Air Pollution Control Model: Farr GS12SQ Manufacture Date: 2014 PM<sub>10</sub> C.E.: 99.995%</p>	<u>PCBG:</u>
Steel Grit Blast Building/Steel Grit Blasting Operations	<p><u>Steel Grit Blasting:</u> Manufacturer: Super Titan Blasting Nozzle Model: Part # VNPL-7 Manufacture Date: April 2002 Blast media: non-silica steel grit Operation: 8,760 hrs/yr Max. New Media Use: 219,000 lb/yr</p>	<p><u>Venturi and Cyclonic Separator Scrubber:</u> Installed: 2014 Manufacturer: Sly Inc. Model: No. 7 Pressure Drop: 11 to 15 in H<sub>2</sub>O Scrubber flow rate: 158 to 162 gpm PM<sub>10</sub> C.E.: 98.0% PM/PM<sub>10</sub> Efficiency used for calculations: 98.0%</p>	<p><u>Steel Grit Blast Building Stack #1:</u> Stack Orientation: Vertical Stack Release Height: 32.34 ft Exhaust Flow Rate: 15,000 acfm Modeled Flow Rate: 10,000 acfm Exit Velocity: 0.001 m/sec Exhaust Temperature: 68 °F</p> <p>Modeled as a Volume Source: <math>\sigma_y = 3.8</math> ft, <math>\sigma_z = 5.8</math> ft</p>
Paint Building/Coating Operations	<p><u>Paint Building:</u> Manufacturer: Custom Building Dimensions: Not given Maximum Materials Use: 14,512 gal/yr Operations: 8,760 hrs/yr</p> <p><u>Paint Spray Gun:</u> Manufacturer: Wagner Paint Gun Model: G-10 Manufacture Date: 2000 Maximum Spray Rate: 12.4 gal/hr Transfer Efficiency: 65% Ratio of PM<sub>10</sub>/PM: 66% Graco G40 with RAC tip HVLP</p> <p><u>Paint Building Heater:</u> Quantity: 1 Rating: 1.375 MMBtu/hr Fuel: natural gas only</p>	<p><u>Negative Pressure Exhaust/Filter Systems (two independent, identical systems):</u> Open face filter inlet: 114 in x 76 in Filter Manufacturer: ATI Model: CS Media Particulate C.E: 98.0% Efficiency used in application: 98.0%</p> <p><u>Paint Building Stack #1:</u> Stack Orientation: Vertical, no cap Stack Release Height: 37.17 ft Stack Diameter: 2.5 ft Exhaust Flow Rate: 10,000 acfm Exhaust Temperature: 68 °F</p> <p><u>Paint Building Stack #2:</u> Stack Orientation: Vertical, no cap Stack Release Height: 37.17 ft Stack Diameter: 2.5 ft Exhaust Flow Rate: 10,000 acfm Exhaust Temperature: 68 °F</p>	<p><u>Paint Building Stack #1:</u> Stack Orientation: Vertical, no cap Stack Release Height: 37.17 ft Stack Diameter: 2.5 ft Exhaust Flow Rate: 10,000 – 12,000 acfm Modeled Flow Rate: 10,000 acfm Exit Velocity: 39.8 ft/sec Exhaust Temperature: 68 °F</p> <p><u>Paint Building Stack #2:</u> Stack Orientation: Vertical, no cap Stack Release Height: 37.17 ft Stack Diameter: 2.5 ft Exhaust Flow Rate: 10,000 – 12,000 acfm Modeled Flow Rate: 10,000 acfm Exit Velocity: 39.8 ft/sec Exhaust Temperature: 68 °F</p>
Tank Asphalt Coating (outdoors)	<p><u>Roller Applied Coating:</u> Max Materials Use: 200 gal of asphalt coating per year Application method: Roller</p>	N/A	N/A

## 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.

The emissions inventory used for facility classification includes only point source emissions. DEQ determined that emissions that are currently being emitted as "process fugitives," including welding and space heater emissions, are sources that could reasonably be controlled and exhausted through a vent or stack. These are treated as point source emissions for the purposes of facility classification and calculation of PTC processing fees. Filters with a 99.6% control efficiency have been installed in the ceiling fans of the Manufacturing Shop Building.

### 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 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 regulated air pollutants as calculated for the previous application (see permit P-2008.0191 issued May 29, 2009).

**Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS**

Source	PM <sub>10</sub> /PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	CO <sub>2e</sub>
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
<b>Point Sources</b>						
Welding Operation	0.32	0.0	0.0	0.0	0.0	0.00
Manufacturing Shop Space Heaters	0.020	0.002	0.247	0.105	0.014	309.2
Steel Grit Blasting Operation	0.28	0.0	0.0	0.0	0.0	0.00
Coating Operation	20.0	0.0	0.0	0.0	119.5	0.00
Paint Building Space Heater	0.046	0.004	0.566	0.241	0.033	708.5
Tank Asphalt Coating	0.0	0.0	0.0	0.0	2.81	0.00
<b>Total, Point Sources</b>	<b>20.67</b>	<b>0.01</b>	<b>0.81</b>	<b>0.35</b>	<b>122.36</b>	<b>1,018</b>

The following table presents the uncontrolled Potential to Emit for HAP pollutants as submitted by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations and the assumptions used to determine emissions for each emissions unit.

**Table 3 UNCONTROLLED POTENTIAL TO EMIT FOR HAZARDOUS AIR POLLUTANTS**

Hazardous Air Pollutants	PTE (T/yr)
Benzene	4.1E-06
Chromium compounds	1.03E-05
Ethyl Benzene	1.25
Formaldehyde	1.5E-04
Hexane (n-Hexane)	0.0036
Lead	3.42E-06
Manganese	1.14E-05
Methyl ethyl ketone (MEK)	2.3
Methyl isobutyl ketone (Hexone)	0.71
Naphthalene	1.2E-06
Nickel	5.82E-06
Toluene	0.88
Xylene (o-, m-, p-isomers)	9.68
<b>Total</b>	<b>14.82</b>

**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. Therefore the pre-project potential to emit was taken from the previous permitting project (see permit P-2008.0191 issued November 15, 2012).

The following table presents the post project Potential to Emit for regulated air pollutants as calculated for the previous application (see permit P-2008.0191 issued November 15, 2012) as this is the pre-project Potential to Emit for this current project.

**Table 4 PRE-PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS**

Source	PM <sub>10</sub> /PM <sub>2.5</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		CO <sub>2</sub> e
	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	T/yr <sup>(b)</sup>
Welding Operation	0.042	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manufacturing Shop Space Heaters	0.0046	0.02	0.00	0.0016	0.056	0.25	0.024	0.11	0.0033	0.014	309.2
Steel Grit Blasting Operation	0.065	0.039	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Operation	0.46	0.9	0.00	0.00	0.00	0.00	0.00	0.00	19.8	38.0	0.00
Paint Building Space Heater	0.010	0.046	0.00	0.004	0.13	0.57	0.055	0.24	0.0076	0.033	708.5
Tank Asphalt Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.47	0.00
<b>Pre-Project Totals</b>	<b>0.58</b>	<b>1.19</b>	<b>0.00</b>	<b>0.01</b>	<b>0.19</b>	<b>0.82</b>	<b>0.08</b>	<b>0.35</b>	<b>20.45</b>	<b>38.52</b>	<b>1,018</b>

- 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.

**Post Project 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 GHG pollutants from all emissions units at the facility as determined by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

**Table 5 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS**

Source	PM <sub>10</sub> /PM <sub>2.5</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		CO <sub>2</sub> e
	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	lb/hr <sup>(a)</sup>	T/yr <sup>(b)</sup>	T/yr <sup>(b)</sup>
Welding Operation	0.042	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manufacturing Shop Space Heaters	0.0046	0.02	0.00	0.0016	0.056	0.25	0.024	0.11	0.0033	0.014	309.2
Plasma Arc Cutting Operations	0.0005	0.002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steel Grit Blasting Operation	0.0007	0.003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Operation	0.46	0.9	0.00	0.00	0.00	0.00	0.00	0.00	19.8	38.0	0.00
Paint Building Space Heater	0.010	0.046	0.00	0.004	0.13	0.57	0.055	0.24	0.0076	0.033	708.5
Tank Asphalt Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.47	0.00
<b>Post Project Totals</b>	<b>0.52</b>	<b>1.15</b>	<b>0.00</b>	<b>0.01</b>	<b>0.19</b>	<b>0.82</b>	<b>0.08</b>	<b>0.35</b>	<b>20.45</b>	<b>38.52</b>	<b>1,018</b>

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.

**Change in Potential to Emit**

The change in facility-wide potential to emit is used to determine if a public comment period may be required and to determine the processing fee per IDAPA 58.01.01.225. The following table presents the facility-wide change in the potential to emit for criteria pollutants.

**Table 6 CHANGES IN POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS**

Source	PM <sub>10</sub> /PM <sub>2.5</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		CO <sub>2</sub> e
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	T/yr
Pre-Project Potential to Emit	0.58	1.19	0.00	0.01	0.19	0.82	0.08	0.35	20.45	38.52	1,018
Post Project Potential to Emit	0.52	1.15	0.00	0.01	0.19	0.82	0.08	0.35	20.45	38.52	1,018
<b>Changes in Potential to Emit</b>	<b>-0.06</b>	<b>-0.04</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>

### Non-Carcinogenic TAP Emissions

A summary of the estimated PTE for emissions increase of non-carcinogenic toxic air pollutants (TAP) is provided in the following table.

Pre- and post-project, as well as the change in, non-carcinogenic TAP emissions are presented in the following table:

**Table 7 PRE- AND POST PROJECT POTENTIAL TO EMIT FOR NON-CARCINOGENIC TOXIC AIR POLLUTANTS**

Non-Carcinogenic Toxic Air Pollutants	Pre-Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Post Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Change in 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Non-Carcinogenic Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
Aluminum, metal & oxide	0.0	4.69E-07	0.00000047	0.667	No
n-Butyl acetate	1.0E-03	1.0E-03	0.0000	47.3	No
n-Butyl alcohol	0.53	0.53	0.0000	10	No
Chromium, metal	0.0	1.0E-03	0.0010	0.033	No
Copper, fume	0.0	3.19E-06	0.0000032	0.013	No
Diglycidyl ether	3.0E-06	3.0E-06	0.0000	0.035	No
Ethyl benzene	1.25	1.25	0.0000	29	No
Hexane (n-Hexane)	0.0036	0.0036	0.0000	12	No
Manganese, fume	0.0	7.73E-07	0.00000077	0.067	No
Methyl n-amyl ketone	0.12	0.12	0.0000	15.7	No
Methyl ethyl ketone (MEK)	2.3	2.3	0.0000	39.3	No
Methyl isobutyl ketone (Hexone)	0.71	0.71	0.0000	13.7	No
1-Methoxy-2-propanol acetate	0.57	0.57	0.0000	24	No
Molybdenum, insoluble	0.0	7.73E-07	0.0000008	0.667	No
Naphthalene	1.2E-06	1.2E-06	0.0000	3.33	No
Pentane	0.0051	0.0051	0.0000	118	No
Phenyl glycidyl ether	9.0E-06	9.0E-06	0.0000	0.4	No
Phosphorus	0.0	2.11E-07	0.00000021	0.007	No
Propylene glycol monomethyl ether	0.17	0.17	0.0000	24	No
Silica, crystalline (quartz)	0.08	0.08	0.0000	0.0067	No
Silicon	0.0	2.84E-06	0.000003	0.667	No
Stoddard solvent	0.72	0.72	0.0000	35	No
Toluene	0.88	0.88	0.0000	25	No
Vanadium	0.0	6.83E-08	0.000000068	0.003	No
VM & P Naphtha	4.2	4.2	0.0000	91.3	No
Xylene (o-, m-, p-isomers)	5.32	5.32	0.0000	29	No

None of the PTEs for non-carcinogenic TAP were exceeded as a result of this project. Therefore, modeling is not required for any non-carcinogenic TAP because none of the 24-hour average carcinogenic screening ELs identified in IDAPA 58.01.01.585 were exceeded.

**Carcinogenic TAP Emissions**

A summary of the estimated PTE for emissions increase of carcinogenic toxic air pollutants (TAP) is provided in the following table.

Pre- and post-project, as well as the change in, carcinogenic TAP emissions are presented in the following table:

**Table 8 PRE- AND POST PROJECT POTENTIAL TO EMIT FOR CARCINOGENIC TOXIC AIR POLLUTANTS**

Carcinogenic Toxic Air Pollutants	Pre-Project Annual Average Emissions Rates for Units at the Facility (lb/hr)	Post Project Annual Average Emissions Rates for Units at the Facility (lb/hr)	Change in Annual Average Emissions Rates for Units at the Facility (lb/hr)	Carcinogenic Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
Benzene	4.10E-03	4.10E-03	0.0000	8.0E-04	No
Chromium VI	0.0	2.27E-09	0.0000000023	5.6E-07	No
Formaldehyde	1.5E-04	1.5E-04	0.0000	5.10E-04	No
Nickel	0.0	5.82E-06	0.0000058	2.7E-05	No
PAHs	2.0E-08	2.0E-08	0.0000	9.1E-05	No

None of the PTEs for carcinogenic TAP were exceeded as a result of this project. Therefore, modeling is not required for any carcinogenic TAP because none of the annual average carcinogenic screening ELs identified in IDAPA 58.01.01.586 were exceeded.

**Post Project HAP Emissions**

The following table presents the post project potential to emit for HAP pollutants from all emissions units at the facility as submitted by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

**Table 9 HAZARDOUS AIR POLLUTANTS EMISSIONS POTENTIAL TO EMIT SUMMARY**

Hazardous Air Pollutants	PTE (T/yr)
Benzene	4.1E-06
Chromium compounds	1.03E-05
Ethyl Benzene	1.25
Formaldehyde	1.5E-04
Hexane (n-Hexane)	0.0036
Lead	3.42E-06
Manganese	1.14E-05
Methyl ethyl ketone (MEK)	2.3
Methyl isobutyl ketone (Hexone)	0.71
Naphthalene	1.2E-06
Nickel	5.82E-06
Toluene	0.88
Xylene (o-, m-, p-isomers)	9.68
<b>Totals</b>	<b>14.82</b>

## **Ambient Air Quality Impact Analyses**

There was no increase in criteria pollutant emissions proposed for the project and all proposed increases in TAP emissions were below the applicable screening ELs identified in IDAPA 58.01.01.585 and 586. Therefore, an ambient air quality impact analysis was not required to be performed for this project.

## **REGULATORY ANALYSIS**

### **Attainment Designation (40 CFR 81.313)**

The facility is located in Twin Falls County, which is designated as attainment or unclassifiable for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, 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  $\geq 10$  T/yr or if the aggregate of all HAPS (Total HAPs) has actual or potential emissions  $\geq 25$  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  $\geq 8$  T/yr of a single HAP or  $\geq 20$  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  $\geq 100$  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  $\geq 80$  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 10 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION**

<b>Pollutant</b>	<b>Uncontrolled PTE (T/yr)</b>	<b>Permitted PTE (T/yr)</b>	<b>Major Source Thresholds (T/yr)</b>	<b>AIRS/AFS Classification</b>
PM	20.67	1.15	100	B
PM <sub>10</sub> /PM <sub>2.5</sub>	20.67	1.15	100	B
SO <sub>2</sub>	0.01	0.01	100	B
NO <sub>x</sub>	0.81	0.82	100	B
CO	0.35	0.35	100	B
VOC	122.36	38.52	100	SM
HAP (single)	9.68	9.68	10	B
HAP (Total)	14.82	14.82	25	B

**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 modified emissions source. Therefore, 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.

**Visible Emissions (IDAPA 58.01.01.625)**

IDAPA 58.01.01.625 Visible Emissions

The sources of PM<sub>10</sub> emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Conditions 2.6 and 2.14.

**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 emissions from this facility do not have a potential to emit greater than 100 tons per year for PM<sub>10</sub>/PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC, or 100,000 tons per year for CO<sub>2</sub>e, or 10 tons per year for any one HAP or 25 tons per year for all HAP combined as demonstrated previously in the Emissions Inventories Section of this analysis. Therefore, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006 and the requirements of IDAPA 58.01.01.301 do not apply.

**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 at a stationary source not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, 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)**

The facility is not subject to any NSPS requirements in 40 CFR Part 60.

### ***NESHAP Applicability (40 CFR 61)***

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

### ***MACT Applicability (40 CFR 63)***

Because the facility is a steel fabrication facility that performs coating operations the following NSPS requirements may or will apply to this facility:

- 40 CFR 63, Subpart MMMM - NESHAP for Surface Coating of Miscellaneous Metal Parts and Products
- 40 CFR 63, Subpart HHHHHH - NESHAP for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
- 40 CFR 63, Subpart XXXXXX – NESHAP for Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

There was no change in the applicability analyses for Subparts MMMM, HHHHHH, and XXXXXX as a result of this project. Therefore, refer to Statement of Basis for project 61061 for the analyses of these three subparts.

### ***Permit Conditions Review***

This section describes the permit conditions for this initial permit or only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

#### ***PERMIT SCOPE***

Permit Condition 1.1 describes the modifications to the existing processes as well as new processes being installed at the facility as a result of this project.

Permit Condition 1.3 explains which previous permit for the facility is being replaced as a result of this project.

Table 1.1 was updated to reflect the new equipment being installed and the changes in product throughputs as a result of this project.

#### ***STRUCTURAL STEEL WELDING, SPACE HEATERS, PLASMA ARC CUTTING, STEEL GRIT BLASTING, METAL PARTS AND PRODUCTS COATING, AND ROLLER APPLIED COATING***

Permit Condition 2.1 was modified to include the additional plasma cutting operation in the process description being permitted as a result of this project.

Permit Condition 2.2 was modified to reflect the changes in the steel grit blasting and painting operations, as well as control equipment, as a result of this project.

Permit Condition 2.3 was modified to reflect the inclusion of emissions from the new plasma cutting operation and the decrease in emissions from the steel grit blasting operation as a result of this project.

Permit Condition 2.4 was modified to reflect the new lower HAPs emissions limit as proposed by the Applicant.

Permit Condition 2.10 was modified to reflect the new proposed increased annual steel grit usage as a result of this project.

Permit Condition 2.11 was modified to reflect the new proposed decrease in annual epoxy, cure, resin, thinner, primer, converter, and coating usage as a result of this project.

Permit Condition 2.13 was modified to reflect the new proposed operating parameters of the new venturi and cyclonic separator scrubber being installed to control particulate matter emissions from the steel grit blasting operation as a result of this project.

Permit Condition 2.14 was modified to reflect the new proposed control efficiency of the filters used in the paint building exhaust filter system as a result of this project.

Permit Conditions 2.25, 2.26, and 2.27 was modified to clarify that if a range of VOC, HAP, or TAP content is listed in the SDS, then the Applicant shall use the highest value in the range. This change was included at the request of Compliance staff.

## **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

**Table 1 PRE-PROJECT POTENTIAL TO EMIT FOR NSR REGULATED POLLUTANTS**

Emissions Unit	PM10	PM25	SO2	NOx	CO	VOC	CO2e
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources							
Welding Operation	0.18	0.18	0	0	0	0	0
Manufacturing shop space heaters	0.02	0.02	0.0016	0.25	0.11	0.014	309.2
Steel Grit Blasting	0.039	0.039	0	0	0	0	0
Coating	0.9	0.9	0	0	0	38	0
Paint Building Space Heater	0.046	0.046	0.004	0.57	0.24	0.033	708.5
Tank Asphalt Coating	0	0	0	0	0	0.47	0
Plasma Cutting	0	0	0	0	0	0	0
<b>Totals</b>	<b>1.185</b>	<b>1.185</b>	<b>0.0056</b>	<b>0.82</b>	<b>0.35</b>	<b>38.52</b>	<b>1017.7</b>

**Table 2 POST-PROJECT POTENTIAL TO EMIT FOR NSR REGULATED POLLUTANTS**

Emissions Unit	PM10	PM25	SO2	NOx	CO	VOC	CO2e
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources							
Welding Operation	0.18	0.18	0	0	0	0	0
Manufacturing shop space heaters	0.02	0.02	0.0016	0.25	0.11	0.014	309.2
Steel Grit Blasting	0.0285	0.00285	0	0	0	0	0
Coating	0.9	0.9	0	0	0	38	0
Paint Building Space Heater	0.046	0.046	0.004	0.57	0.24	0.033	708.5
Tank Asphalt Coating	0	0	0	0	0	0.47	0
Plasma Cutting	0.00214	0.00214	0	0	0	0	0
<b>Totals</b>	<b>1.177</b>	<b>1.151</b>	<b>0.006</b>	<b>0.82</b>	<b>0.35</b>	<b>38.52</b>	<b>1017.7</b>

**Table 3 CHANGES IN POTENTIAL TO EMIT FOR NSR REGULATED POLLUTANTS**

Emissions Unit	PM10	PM25	SO2	NOx	CO	VOC	CO2e
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources							
Welding Operation	0	0	0	0	0	0	0
Manufacturing shop space heaters	0	0	0	0	0	0	0
Steel Grit Blasting	-0.0105	-0.03615	0	0	0	0	0
Coating	0	0	0	0	0	0	0
Paint Building Space Heater	0	0	0	0	0	0	0
Tank Asphalt Coating	0	0	0	0	0	0	0
Plasma Cutting	0.00214	0.00214	0	0	0	0	0
<b>Totals</b>	<b>-0.008</b>	<b>-0.034</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 1. PRE- AND POST PROJECT NON-CARCINOGENIC TAP EMISSIONS SUMMARY  
POTENTIAL TO EMIT**

Non-Carcinogenic Toxic Air Pollutants (sum of all emissions)	Pre-Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Post Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Change in 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Non-Carcinogenic Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
n-Butyl acetate	1.00E-03	1.00E-03	0.00E+00	47.3	No
n-Butyl alcohol	5.30E-01	5.30E-01	0.00E+00	10	No
Diglycidyl ether	3.00E-06	3.00E-06	0.00E+00	0.035	No
Ethyl Benzene	1.25E+00	1.25E+00	0.00E+00	29	No
Hexane (n-Hexane)	3.60E-03	3.60E-03	0.00E+00	12	No
Methyl n-amyl ketone	1.20E-01	1.20E-01	0.00E+00	15.7	No
Methyl Ethyl Ketone	2.30E+00	2.30E+00	0.00E+00	39.3	No
Methyl Isobutyl Ketone (Hexone)	7.10E-01	7.10E-01	0.00E+00	13.7	No
1-Methoxy-2-propanol acetate	5.70E-01	5.70E-01	0.00E+00	24	No
Naphthalene	1.20E-06	1.20E-06	0.00E+00	3.33	No
Pentane	5.10E-03	5.10E-03	0.00E+00	118	No
Phenyl glycidyl ether	9.00E-06	9.00E-06	0.00E+00	0.4	No
Propylene glycol monomethyl ether	1.70E-01	1.70E-01	0.00E+00	24	No
Silica, crystalline (quartz)	8.00E-02	8.00E-02	0.00E+00	0.0067	No
Stoddard solvent	7.20E-01	7.20E-01	0.00E+00	35	No
Toluene	8.80E-01	8.80E-01	0.00E+00	25	No
VM&P Naphtha	4.20E+00	4.20E+00	0.00E+00	91.3	No
Xylene (o-, m-, p- isomers)	5.32E+00	5.32E+00	0.00E+00	29	No
Aluminum	0.00E+00	4.69E-07	4.69E-07	6.67E-01	No
Chromium, total	0.00E+00	1.03E-05	1.03E-05	3.30E-02	No
Copper	0.00E+00	3.19E-06	3.19E-06	1.30E-02	No
Lead	0.00E+00	3.42E-06	3.42E-06	N/A	No
Maganese	0.00E+00	1.14E-05	1.14E-05	6.70E-02	No
Molybdenum	0.00E+00	7.73E-07	7.73E-07	6.67E-01	No
Phosphorus	0.00E+00	2.11E-07	2.11E-07	7.00E-03	No
Silicon	0.00E+00	2.84E-06	2.84E-06	6.67E-01	No
Vanadium	0.00E+00	6.83E-08	6.83E-08	6.70E-02	No

**Table 2. PRE- AND POST PROJECT CARCINOGENIC TAP EMISSIONS SUMMARY POTENTIAL TO EMIT**

Carcinogenic Toxic Air Pollutants (sum of all emissions)	Pre-Project Annual Average Emissions Rates for Units at the Facility (lb/hr)	Post Project Annual Average Emissions Rates for Units at the Facility (lb/hr)	Change in Annual Average Emissions Rates for Units at the Facility (lb/hr)	Carcinogenic Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
<b>Chromium VI</b>	<b>0.00E+00</b>	<b>2.27E-09</b>	<b>2.27E-09</b>	<b>5.60E-07</b>	<b>No</b>
<b>Nickel</b>	<b>0.00E+00</b>	<b>5.82E-06</b>	<b>5.82E-06</b>	<b>2.70E-05</b>	<b>No</b>
<b>Benzene</b>	<b>4.10E-06</b>	<b>4.10E-06</b>	<b>0</b>	<b>8.00E-04</b>	<b>No</b>
<b>Formaldehyde</b>	<b>1.50E-04</b>	<b>1.50E-04</b>	<b>0</b>	<b>5.10E-04</b>	<b>No</b>
<b>PAHs</b>	<b>1.90E-08</b>	<b>1.90E-08</b>	<b>0</b>	<b>9.10E-04</b>	<b>No</b>

**Pre-project** average emissions are the existing allowable emission rates.

**Post-project** average emissions are the new proposed emission rates.

**Table X HAP POTENTIAL TO EMIT EMISSIONS SUMMARY**

HAP Pollutants	PTE (T/yr)
Ethyl Benzene	1.25
Hexane (n-Hexane)	0.0036
Methyl Ethyl Ketone	2.3
Methyl Isobutyl Ketone (Hexone)	0.71
Naphthalene	1.2E-06
Toluene	0.88
Chromium Compounds	1.03E-05
Lead	3.42E-06
Manganese	1.14E-05
Nickel	5.82E-06
Benzene	4.1E-06
Formaldehyde	1.5E-04
<b>Total</b>	<b>10.5</b>

\* Maximum Individual HAP

Applicants are encouraged to call DEQ's Air Quality Permit Hotline (1-877-573-7648) to ask questions as they prepare the application.

**Emission Inventory Instructions:**

1. Use the same emission unit name throughout the application (i.e. in air pollution control equipment forms and for modeling purposes).
2. The application must **show in detail all calculations** used to develop the PTE summary and include:
  - Electronic copies of any spreadsheets used to estimate emissions. If a spreadsheet is used submit an electronic copy of the spread sheet (i.e. Excel File).
  - Documentation of all calculations conducted by hand (i.e. show all calculations).
  - Clear statements on all assumptions relied upon in estimating emissions.
  - Documentation of the emissions factors used to estimate emissions. If the emissions factor documentation is readily available to DEQ, such as an EPA AP-42 emissions factor, a simple reference to the emissions factor suffices. If the emissions factor documentation is not readily available to DEQ the applicant must submit the documentation with the application; ask DEQ if you are uncertain. **Applications**

## APPENDIX B – FACILITY DRAFT COMMENTS

**The following comments were received from the facility on March 9, 2016:**

**Facility Comment:** Statement of Basis, Application Scope – Insert the word “new” when discussing the increase in steel grit usage proposed by the Applicant.

**DEQ Response:** The requested change will be made to the permit.

**Facility Comment:** Statement of Basis, Table 1, Emissions Unit and Control Equipment Information (same comment on for permit Tables 1.1 and 2.1) – Specify that the plasma cutter baghouse is manufactured by “Camfil Air Pollution Control”.

**DEQ Response:** The requested change will be made to the permit.

**Facility Comment:** Statement of Basis, Table 1, Emissions Unit and Control Equipment Information (same comment on for permit Tables 1.1 and 2.1) – Specify that the negative pressure exhaust/filter system is manufactured by “ATI”.

**DEQ Response:** The requested change will be made to the permit.

**Facility Comment:** Statement of Basis, Table 1, Emissions Unit and Control Equipment Information (same comment on for permit Tables 1.1 and 2.1) – Specify that the negative pressure exhaust/filter system filter manufacturer is “CS Media”.

**DEQ Response:** The requested change will be made to the permit.

**Facility Comment:** Statement of Basis, Table 1, Emissions Unit and Control Equipment Information (same comment on for permit Tables 1.1 and 2.1) – Specify that the negative pressure exhaust/filter system control efficiency is 98.0%.

**DEQ Response:** The requested change will be made to the permit.

**Facility Comment:** Statement of Basis, Table 1, Emissions Unit and Control Equipment Information (same comment on for permit Tables 1.1 and 2.1) – Specify that the steel grit blasting media is “new”.

**DEQ Response:** The requested change will be made to the permit.

**Facility Comment:** Permit Condition 2.1, Process Description – Specify that emissions from the grit blasting operations are vented through a vertical (not horizontal) stack that is located in the top of the building.

**DEQ Response:** The requested change will be made to the permit.

**Facility Comment:** Permit Condition 2.10, Steel Grit Use Limit – Specify that the annual steel grit usage limit is for “new” steel grit.

**DEQ Response:** The requested change will be made to the permit.

**Facility Comment:** Permit Condition 2.22, Steel Grit Usage Records – Specify that the annual steel grit usage being monitored is for “new” steel grit.

**DEQ Response:** The requested change will be made to the permit.

## APPENDIX C – PROCESSING FEE

## PTC Fee Calculation

**Instructions:**

Fill in the following information and answer the following questions with a Y or N. Enter the emissions increases and decreases for each pollutant in the table.

**Company:** K&T Steel Corporation  
**Address:** 322 Diamond Ave. West  
**City:** Twin Falls  
**State:** ID  
**Zip Code:** 83301  
**Facility Contact:** Keith DePew  
**Title:** Facility permitting contact  
**AIRS No.:** 083-00087

- N** Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N
- Y** Did this permit require engineering analysis? Y/N
- N** Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

<b>Emissions Inventory</b>			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO <sub>x</sub>	0.0	0	0.0
SO <sub>2</sub>	0.0	0	0.0
CO	0.0	0	0.0
PM10	0.0	0.04	0.0
VOC	0.0	0	0.0
TAPS/HAPS	0.0	0	0.0
<b>Total:</b>	<b>0.0</b>	<b>0.04</b>	<b>0.0</b>
Fee Due	<b>\$ 1,000.00</b>		

Comments: