

## **Statement of Basis**

**Permit to Construct No. P-2017.0010  
Project ID 61852**

**C. Wright Construction Co., Inc.  
Meridian, Idaho**

**Facility ID 001-00019**

**Final**

**August 8, 2017**   
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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
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
dscfm	dry standard cubic feet per minute
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
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**

C. Wright Construction Co., Inc. mines river deposits for sand and aggregate production. C. Wright Construction Co., Inc. sells river deposits and sand and aggregate to the general public and uses processed sand and aggregates in a hot-mix asphalt plant to produce asphaltic concrete. Emissions from the facility are primarily fugitive dust; however, additional emissions include combustion product emissions from the natural gas-fired hot-mix asphalt burner and process emissions associated with hot-mix asphalt production. Electrical power for asphaltic oil tank heater, conveyors, etc. is supplied by the local utility. This facility's potential to emit is being limited as part of the Northern Ada County PM<sub>10</sub> Maintenance Plan.

### **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).

March 1, 1976	0020-0019, Pollution source permit, Permit status (S)
July 8, 2003	T2-000033, Tier II Operating Permit for Norther Ada County PM <sub>10</sub> Maintenance Plan, Permit status (S)
May 13, 2005	T2-030055, Asphalt production increase, Permit status (S)
October 9, 2008	T2-2008.0054, Tier II operating permit renewal, Permit status (A, but will become S upon issuance of this permit)

### **Application Scope**

This permit to construct (PTC) is for a modification at an existing minor facility.

The applicant has proposed to:

- Convert the existing Tier II operating permit to a PTC.
- Replace the existing control device, the wet-scrubber, with a fabric filter baghouse.
- To upgrade the following equipment:
  - Replace the drum dryer burner with SJG4220 G by Hauck Manufacturing. The burner is designed to fire natural gas fuel only. The rated heat input of the Hauck Burner is 40 MMBtu/hr.
  - Upgrade the dryer drum with combustion and mixing flights to the factory recommended length. This modification will control "blue smoke" emissions in the counter-flow hot mix asphalt (HMA) plant.
  - Upgrade the dryer and burner control shack.

As a result of the drum dryer upgrading, the rated capacity of HMA plant has increased from 106 T/hr to 130 T/hr. While hourly emissions of regulated air pollutants from HMA plant increase, the hourly emissions rate for PM<sub>10</sub> from the drum dryer after the control device remains the same because of the installation of the baghouse. The annual emissions do not change because the annual throughput is kept the same.

- To increase daily asphalt production from 1,272 T/day (i.e., 106 t/yr x 12 hr/day = 1,272 T/day) to 2,544 T/day.

Because the existing Tier II operating permit has a 12 hours/day operating limit, the permittee would be able to operate to 1,560 T/day (i.e., 130 T/hr x 12 hr/day = 1,560 T/day) but not to 2,544 T/day.

### **Application Chronology**

February 10, 2017                      DEQ received an application fee.

February 21, 2017	DEQ received an application.
March 22, 2017	DEQ determined that the application was incomplete.
April 14, 2017	DEQ received supplemental information from the applicant.
April 19, 2017	DEQ determined that the application was complete.
May 15, 2017	DEQ made available the draft permit and statement of basis for peer and regional office review.
May 22, 2017	DEQ made available the draft permit and statement of basis for applicant review.
May 22, 2017	DEQ received the permit processing fee.
August 8, 2017	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
NA	<u>Hot-mix Asphalt Plant</u>  Drum Dryer  Manufacturer: Barber Green 1950 Model: Stansteel 7 x 32 Manufactured Date: 1950  Drum Dryer Burner  Manufacturer: Hauck Manufacturing Model: SJG4220 G Manufactured Date: 2016 Rated heat input: 40 MMBtu/hr  Maximum asphalt production: 130 T/hr Fuel type: natural gas	<u>Baghouse</u> Manufacturer: Cedar Rapids Model: 42447  Particulate matter emission concentration: 0.01 gr/dscf  Baghouse flowrate: 47,000 dscfm
NA	Emissions associated with mined and processed river deposits	Reasonable water application

### *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.

Using this definition of Potential to Emit, an emission inventory for the HMA was developed by DEQ. Emissions estimates of criteria pollutant and HAP PTE were based on emission factors from AP-42, proposed operation limits, existing permit limits, and process information specific to the facility (e.g., baghouse info. from the applicant) for this proposed project.

### 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.

This project does not change the facility’s classification as a Synthetic Minor source.

### 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.

The following table presents the pre-project potential to emit for criteria pollutants from the HMA plant for the drum dryer with a web scrubber using DEQ’s HMA spreadsheet.

Table 2 PRE-PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Pollutant	Drum Mix Max Emission Rate for Pollutant (T/yr)	Load-out & Silo Filling, Emission Rate for Pollutant (T/yr)	POINT SOURCE TOTAL of Max Emission Rates from A, B, & C (T/yr) Exclude Fugitives (D)
PM <sub>10</sub> (total)	1.80	4.43E-02	1.80
PM <sub>2.5</sub>	1.80	4.43E-02	1.80
CO	5.20	1.01E-01	5.20
NO <sub>x</sub>	1.04	---	1.04
SO <sub>2</sub>	0.14	---	0.14
VOC	1.28	1.61E-01	1.28
Lead	2.48E-05	---	2.48E-05

### 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 pollutants from the HMA plant for the drum dryer with a baghouse using DEQ’s HMA spreadsheet. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 3 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Pollutant	Drum Mix Max Emission Rate for Pollutant (T/yr)	Load-out & Silo Filling, Emission Rate for Pollutant (T/yr)	POINT SOURCE TOTAL of Max Emission Rates from A, B, & C (T/yr) Exclude Fugitives (D)
PM <sub>10</sub> (total)	1.49	4.43E-02	1.49
PM <sub>2.5</sub>	1.49	4.43E-02	1.49
CO	5.20	1.01E-01	5.20
NO <sub>x</sub>	1.04	---	1.04
SO <sub>2</sub>	0.14	---	0.14
VOC	1.28	1.61E-01	1.28
Lead	2.48E-05	---	2.48E-05

**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 4 CHANGES IN POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Pollutant	Point Source Total (T/yr)
PM <sub>10</sub> (total)	-0.31
PM <sub>2.5</sub>	-0.31
CO	0.00
NO <sub>x</sub>	0.00
SO <sub>2</sub>	0.00
VOC	0.00
Lead	0.00E+00

**Non-Carcinogenic TAP Emissions**

A summary of non-carcinogenic TAP increments as a result of this project is provided in the following table. Detailed calculations can be found in Appendix A of this statement of basis.

Table 5 TOXIC AIR POLLUTANTS INCREMENTS

TOTAL	Adjusted lb/hr	TAP Emissions Screen Level (EL)	Exceeds TAPs EL?
<b>Non-PAH HAPs</b>			
Ethylbenzene	3.08E-03	29	No
Hexane	1.13E-02	12	No
Methyl Ethyl Ketone	8.15E-05	39.3	No
Methyl chloroform	5.76E-04	127	No
Toluene	2.00E-03	25	No
Xylene	3.38E-03	29	No

TOTAL	Adjusted lb/hr	TAP Emissions Screen Level (EL)	Exceeds TAPs EL?
<b>Non-HAP Organic Compounds</b>			
Acetone	1.04E-04	119	No
Heptane	1.13E-01	109	No
n-Pentane	2.52E-03	118	No
<b>Metals</b>			
Antimony <sup>e</sup>	2.16E-06	0.033	No
Barium	6.96E-05	0.033	No
Chromium	6.60E-05	0.033	No
Cobalt	3.12E-07	0.0033	No
Copper	3.72E-05	0.013	No
Manganese	9.24E-05	0.067	No
Mercury	2.88E-06	0.003	No
Phosphorus	3.36E-04	0.007	No
Silver	5.76E-06	0.007	No
Selenium	4.20E-06	0.013	No
Thallium	4.92E-08	0.007	No
Zinc	7.32E-04	0.667	No

None of the ELs 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 non-carcinogenic screening ELs identified in IDAPA 58.01.01.585 were exceeded.

### **Carcinogenic TAP Emissions**

Because the annual throughput is kept the same, the carcinogenic TAP emissions won't change. Therefore, the increment for each carcinogenic TAP is zero.

### **Post Project HAP Emissions**

Because the annual throughput is kept the same, the total HAP emissions won't change. It is 0.22 T/yr.

### ***Ambient Air Quality Impact Analyses***

According to State of Idaho Guideline for Performing Air Quality Impact Analyses, an ambient impact analysis is not required because the annual emissions changes are Below Regulatory Concern.

## **REGULATORY ANALYSIS**

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

The facility is located in Ada County which is designated as attainment or unclassifiable for PM<sub>10</sub>, PM<sub>2.5</sub>, CO, NO<sub>2</sub>, SO<sub>x</sub>, and Ozone. Reference 40 CFR 81.313.

### ***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 6 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION**

Pollutant	Uncontrolled PTE (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM	>100	<80	100	SM
PM <sub>10</sub>	>100	<80	100	SM
PM <sub>2.5</sub>	>100	<80	100	SM
SO <sub>2</sub>	<100	<100	100	B
NO <sub>x</sub>	<100	<100	100	B
CO	<100	<100	100	B
VOC	<100	<100	100	B
HAP (single)	<10	<10	10	B
HAP (total)	<25	<25	25	B
Pb	<100	<100	100	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. 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). The applicant has requested to convert the existing Tier II operating permit to a PTC. Therefore, the procedures of IDAPA 58.01.01.400-410 were not applicable to this permitting action.

**Idaho SIP - Northern Ada County (Boise), Idaho, PM-10 Maintenance Plan**

(<https://yosemite.epa.gov/R10/AIRPAGE.NSF/f3f22921988a261b882569e5005ee8bb/a12c8ea43bfb9ef88256f3f0081c72c!OpenDocument>)

The facility is subject to Northern Ada County (Boise), Idaho, PM-10 Maintenance Plan, specifically, is subject to some requirements in the Tier II operating permit issued to the facility on 7/8/2003. Permit conditions originated from that Tier II operating permit are noted as Northern Ada County SIP Requirement in the PTC.

**Visible Emissions (IDAPA 58.01.01.625)**

**IDAPA 58.01.01.625..... Visible Emissions**

The sources of PM emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Conditions 3.4, 3.5, 3.10, and 3.12.

**Fugitive Emissions (IDAPA 58.01.01.650)**

**IDAPA 58.01.01.650..... Rules for the Control of Fugitive Emissions**

The sources of fugitive emissions at this facility are subject to the State of Idaho fugitive emissions standards. These requirements are assured by Permit Conditions 2.1, 2.2, and 2.4.

**Rules for Control of Odors (IDAPA 58.01.01.775)**

**IDAPA 58.01.01.750..... Rules for Control of Odors**

IDAPA 25.01.01.776.01 states that no person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution. These requirements are assured by Permit Conditions 2.3 and 2.5.

**Rules for Control of Hot-Mix Asphalt Plants (IDAPA 58.01.01.805)**

**IDAPA 58.01.01.805..... Rules for Control of Hot-Mix Asphalt Plants**

The purpose of Sections 805 through 808 is to establish for hot-mix asphalt plants restrictions on the emission of particulate matter.

Section 806 states that no person shall cause, allow or permit a hot-mix asphalt plant to have particulate emissions which exceed the limits specified in Sections 700 through 703. As demonstrated previously, these requirements have been met by the proposed PM<sub>10</sub> emissions rate.

Section 807 states that in the case of more than one stack to a hot-mix asphalt plant, the emission limitation will be based on the total emission from all stacks. The proposed facility only has one stack for emissions from the asphalt drum dryer so there is no need to combine emissions limits from multiple stacks into one stack as required.

Section 808.01 requires fugitive emission controls as follows: No person shall cause, allow or permit a plant to operate that is not equipped with an efficient fugitive dust control system. The system shall be operated and maintained in such a manner as to satisfactorily control the emission of particulate material from any point other than the stack outlet.

Section 808.02 requires plant property dust controls as follows: The owner or operator of the plant shall maintain fugitive dust control of the plant premises and plant owned, leased or controlled access roads by paving, oil treatment or other suitable measures. Good operating practices, including water spraying or other suitable measures, shall be employed to prevent dust generation and atmospheric entrainment during operations such as stockpiling, screen changing and general maintenance.

These requirements are assured by Permit Conditions 2.1, 2.2, and 2.4.

**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 regulated air pollutants, 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)**

40 CFR 60, Subpart OOO..... Standards of Performance for Nonmetallic Mineral Processing Plants

The facility has two sources that are subject to this subpart. The skimmer screen deck (1986 project) and the stand-alone screen deck (1997 project) shall not exhibit greater than 10 % opacity as required by CFR 60.762(b). The opacity shall be determined using the procedure specified in IDAPA 58.01.01.625.04.

This subpart is delegated to DEQ. DEQ is the administrator for this subpart.

40 CFR 60, Subpart I ..... Standards of Performance for Hot Mix Asphalt Facilities

The HMA plant is subject to this subpart. Refer to Appendix B of this document for a detailed regulation analysis.

This subpart is delegated to DEQ. DEQ is the administrator for this subpart.

**NESHAP Applicability (40 CFR 61)**

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

**MACT Applicability (40 CFR 63)**

The facility is not subject to any MACT standards in 40 CFR Part 63.

**Permit Conditions Review**

This section describes those permit conditions that have been added, revised, modified or deleted as a result of this permitting action. SIP requirements are identified in the permit located directly under the permit condition and on the right-hand margin.

**Facility-Wide Conditions**

Permit Conditions 1.1 to 1.3

Permit Condition 1.1 states the purpose of this permitting action. It allows the permittee to operate the existing HMA plant under the existing permit until January 1, 2018 because the permittee needs to complete the contracts for this year and will replace the drum dryer when this season is over. Permit Condition 1.2 states that those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin. Permit Condition 1.3 states on January 1, 2018 this PTC replaces Tier II operating permit No T2-2008.0054, issued on October 9, 2008.

Table 1.1 is revised to reflect the changes made to the drum dryer and its control.

Permit condition 2.1 establishes that the permittee shall take all reasonable precautions to prevent fugitive particulate matter (PM) from becoming airborne and provides examples of the controls in accordance with IDAPA 58.01.01.650-651.

Permit condition 2.2 establishes that the asphalt plant shall employ efficient fugitive dust controls and provides examples of the controls in accordance with IDAPA 58.01.01.808.01 and 808.02.

Permit condition 2.3 establishes that there are to be no emissions of odorous gases, liquids, or solids from the permit equipment into the atmosphere in such quantities that cause air pollution.

Permit condition 2.4 establishes that the permittee shall monitor fugitive dust emissions on a daily basis to demonstrate compliance with the facility-wide permit requirements.

Permit condition 2.5 establishes that the permittee monitor and record odor complaints to demonstrate compliance with the facility-wide permit requirements.

Permit Condition 2.6 establishes that the permittee shall maintain records as required by the Monitoring and Recordkeeping General Provision.

Permit condition 2.8 establishes that the federal requirements of 40 CFR Part 60, Subpart I – Standards of Performance for Hot Mix Asphalt Plants and Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants are incorporated by reference into the requirements of this permit per current DEQ guidance.

Permit Condition 2.9 and Table 2.1 incorporate 40 CFR 60, Subpart A – General Provisions.

Old Permit Condition 2.11 regarding grain loading standards of fuel-burning equipment is removed as according to DEQ's inspector, the facility does not have fuel-burning equipment on site.

### **Hot-Mix Asphalt Plant**

Permit condition 3.1 provides a process description of the asphalt production process at this facility.

Permit condition 3.2 provides a description of the control devices used on the asphalt production equipment at this facility.

Table 3.1 is revised to reflect that a baghouse replaces the wet scrubber to control emissions from the drum dryer of the HMA plant.

Permit condition 3.3 establishes the hourly and annual emissions limits for PM<sub>10</sub> from the asphalt production operation at this facility.

Table 3.2

The short term emissions are estimated using the information in the application and with a 20% safety coefficient:  $(0.01 \text{ gr/dscf}) * (47,000 \text{ dscfm}) * (1/7,000 \text{ gr}) * (60 \text{ min/hr}) * 1.20 = 4.03 \text{ lb/hr} * 1.20 = 4.83 \text{ lb/hr}$ . It is close to the existing limit of 4.86 lb/hr. DEQ staff has decided to keep the short term lb/hr as it is, same as in the SIP.

The long term emissions limit is unchanged because the annual throughput and short term emissions limit are kept the same.

Permit condition 3.4 incorporates the particulate matter and opacity standards of 40 CFR 60, Subpart I – Standards of Performance for Hot Mix Asphalt Plants.

As discussed previously, Permit Condition 3.5 establishes a 20% opacity limit for the asphalt drum mixer baghouse stack, the asphaltic oil tank heater stack, the load-out station stack(s), and the silo filling slat conveyor stacks or functionally equivalent openings associated with the asphalt production operation.

Permit Condition 3.6 establishes a new hourly asphalt production limit for the asphalt production operation as proposed by the Applicant.

Permit Condition 3.9 establishes that a baghouse is to be used to control emissions from the asphalt drum dryer as proposed by the Applicant.

Permit Condition 3.10 establishes PM performance testing requirements as required by 40 CFR 60, Subpart I for Hot Mix Asphalt Plants.

Permit Condition 3.11 establishes PM testing methods and procedures as required by 40 CFR 60, Subpart I for Hot Mix Asphalt Plants.

Permit Condition 3.12 establishes PM<sub>10</sub> performance testing requirements required by DEQ on asphalt plants located in the state of Idaho.

Permit Condition 3.13 establishes PM<sub>10</sub> performance testing methods and procedures required by DEQ on asphalt plants located in the state of Idaho.

Permit condition 3.14 establishes that the permittee monitor asphalt production, visible emissions, RAP percentage usage, and the fuel combusted in the asphalt drum dryer during the performance tests to establish the validity of the performance tests.

Permit condition 3.15.1 establishes that the Permittee shall monitor and record hourly asphalt production to demonstrate compliance with the Asphalt Production Limits permit condition.

Permit condition 3.16 establishes that the Permittee shall establish procedures for operating the baghouse. This is a DEQ imposed standard requirement for operations using baghouses to control particulate emissions.

Permit Condition 3.17 establishes that the permittee shall submit the results of the performance tests to the appropriate DEQ office.

General Provisions 6 is updated using the current PTC template.

## **PUBLIC REVIEW**

### ***Public Comment Opportunity***

Because this permitting action does not authorize emissions increase, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04.

## **PROCESSING FEE**

In accordance with IDAPA 58.01.01.225, the processing fee is \$1,000.

## APPENDIX A – EMISSIONS INVENTORIES

## CURRENT PTC APPLICATION VALUES

DEQ Verification Worksheets: Hot Mix Asphalt (HMA) Drum Mix Facility Data			
Facility ID/AIRS No.	001-00019	Spreadsheet Date	5/12/2017 15:08
Permit No.	P-2008.0054 PROJ 61852	DEQ Version Date	7/20/2011
Facility Owner/Company Name:	C. Wright Construction, Inc.		
Address:	Facility Address		
City, State, Zip:	1320 South Black Cat Road		
Facility Contact:	Mr. Tim Wright		
Contact Number/ e-mail:	(208) 888-1307		
		Include Silo Fill & Loadout Emissions?	Y
Use Short Term Source Factor on 586 ELs? Y/N	N	Use T-RACT on 586 AACCC? Y/N	N
<b>Hot Mix Plant AP-42 Section 11.1</b>	<b>Input (Bold Color) or Calculated Value (Black)</b>	<b>Fuel Type(s)</b>	<b>Fuel Type Toggle ("0" or "1")</b>
Drum Dryer Make/Model	Stantsteel 32' x 7'	Distillate (#2) Fuel Oil	0
Rated heat input capacity, MMBtu/hr	40	Used Oil or RFO4 Oil	0
Drum Dryer Hourly HMA Production, Tons/hour	130	Natural Gas	1
Max Production Per day, Tons per day	1,560	LPG or Propane	0
Max Annual HMA Production, Tons/year	80,000	Default #2 fuel oil and used oil sulfur content percentage by weight	0.0015% and 0.5%
Min Hours of operation per year (annual/max hourly production)	615	#2 Fuel Oil Max Sulfur Content	0.0015%
		Used Oil/RFO4 Oil Max Sulfur Content	0.5000%
<b>Asphaltic Oil Tank Heater AP-42, Section 11.1 (oil or natural gas fuel), or Section 1.4 (natural gas fuel)</b>			
Rated heat input capacity, MMBtu/hr	0.000	Fuel Type(s)	Fuel Toggle
Hours of operation per day	0	#2 Fuel Oil	0
Operation, days per year (DEQ Assumption)	615	Fuel oil sulfur content	0.500%
Max Hours of operation per year (DEQ Assumption)	4,000	Natural Gas	0
<b>Asphaltic Oil Tank Heater Fuel Consumption Calculations</b>	<b>#2 Fuel Oil</b>	<b>Natural Gas</b>	
Heat Input Rating, MMBtu/hr	0.000	0.000	
Fuel Heating Value, Btu/gal (oil) or Btu/scf (gas)	137,030	1,020	
Heating Value Correction for Natural Gas EFs, see Note	n/a	1.000	
Theoretical Max Fuel Use Rate gal/hr [oil] or scf/hr [gas]	0.00	0	
Max Operational Hours per Year	4,000	4,000	
Note: AP-42 EFs for natural gas and diesel combustion are based on heat value of 1,020 Btu/scf and 137,030 Btu/gal			
<b>IC Engine EI Conversion Factors</b>			
1 hp = 0.7456999 kW	0.7457	1 lb = (g)	453.59
Avg brake-specific fuel consumption (BSFC) = 7000 Btu/hp-hr	7000	Fuel Heating Value, Btu/gal	137,030
Note: AP-42 Tables 3.3-x,3.4-x: avg. diesel heating value is based on 19,300 Btu/lb with density equal 7.1 lb/gal=> Btu/gal = 137,030			
<b>NOTE: THE HMA EI SUMMARY WORKSHEETS ONLY ALLOWS ONE SMALL AND/OR ONE LARGE IC ENGINE.</b>			
<b>IC Engine 1 &lt; 600 bhp (447 kW) AP-42 Section 3.3 (diesel fueled)</b>			
IC Engine Make/Model	make/model	Fuel Type(s)	IC Engine Toggle
IC Engine Max Rated Power (bhp)	0	#2 Fuel Oil (Diesel)	1
IC Engine Max Rated Capacity (kW)	0	Max Sulfur weight percentage	0.0015%
		Max Operational Hours/Day	0
IC Engine 1 EPA Certification:	0	Max Operational Hours/Year	0
Not EPA-certified: Enter "0" (zero)		Calculated Max Fuel Use Rate, gal/hr	0.00
Certified Tier 1, Tier 2, or Tier 3: Enter 1, 2, or 3		Calculated MMBtu/hr	0.00
Certified "BLUE SKY" engine: Enter 4			
<b>ERROR - IC ENGINE 2 RATING IS LESS THAN 600 bhp</b>			
<b>IC Engine 2 &gt; 600 bhp (447 kW) AP-42 Section 3.4 (diesel fueled)</b>			
IC Engine Make/Model	make/model	Fuel Type(s)	IC Engine Toggle
IC Engine Rated Capacity (bhp)	0	#2 Fuel Oil (Diesel)	1
IC Engine Max Rated Capacity (kW)	0	Max Sulfur weight percentage	0.0015%
		Max Operational Hours per Day	0
IC Engine 2 EPA Certification:	0	Max Operational Hours per Year	0
Not EPA-certified: Enter "0" (zero)		Calculated Max Fuel Use Rate, gal/hr	0.00
Certified Tier 1, Tier 2, or Tier 3: Enter 1, 2, or 3		Calculated MMBtu/hr	0.00
Certified "BLUE SKY" engine: Enter 5			
<b>Aggregate Handling - Fugitive Emissions</b>			
U = mean wind speed (miles per hour)	10		
<b>Moisture/Control % Considerations:</b>			
AP-42 Table 11.19.2-2, Note b. Moisture content of uncontrolled sources ranged from 0.21 to 1.3%			
AP-42 Table 11.19.2-2, Note b. Moisture content of controlled (water spray) sources ranged from 0.55 to 2.88% -->			
--> ~91.3% control for screening, ~95% control for conveyor tr			
M = moisture content (%)	3	Bulk aggregate for HMA typically stabilizes at 3 to 5% by weight.	
If higher moisture is maintained, apply additional % control:	90.00%	For M=3% add 10% control. For M=5% add 15% control. 90% control	
Number of front-end loader drop points (aggregate and RAP) (DEQ Assumption)	2	Drops to storage pile(s) and drop(s) to bins	
Aggregate weigh conveyor transfer points (DEQ Assumption)	2	Transfer from bins to conveyor & from conveyor to scalping screen	
Number of scalping screens (DEQ Assumption)	1	Includes all aggregate and RAP tonnage.	
Aggregate conveyor transfer to drum (DEQ Assumption)	1	Includes all aggregate and RAP tonnage.	



Max Controlled Emissions of Any Pollutant from Drum Mix HMA Plant Fabric Filter, Tank Heater, Generator, Silo Filling/Load-out  
 A. Drum Mix Plant: 190 Tons/year 60,000 Hours/year  
 Maximum emission for each pollutant from any fuel-burning option selected on "Facility Data" worksheet. Fuels Selected = Natural Gas  
 B. Tank Heater: 0.000 MMBtu/hr 4,000 Hours/year  
 Maximum emission for each pollutant from any fuel-burning option selected on "Facility Data" worksheet. Fuels Selected = Natural Gas  
 C1. IC Engine 1: 0.00 gal/hour 0 Hours/year IC Engine < 600hp  
 C2. IC Engine 2: 0.00 gal/hour 0 Hours/year IC Engine > 600hp

Pollutant	A Drum Mix Max Emission Rate for Pollutant (lb/hr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (lb/hr)	C IC Engine 1 + IC Engine 2 Max Emission Rate for Pollutant (lb/hr)	D Load-out & Silo Filling Rate for Pollutant (lb/hr)	E TOTAL of Max Emission Rates from A, B, C & D (lb/hr)	Pollutant	A Drum Mix Max Emission Rate for Pollutant (lb/hr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (lb/hr)	C IC Engine 1 + IC Engine 2 Max Emission Rate for Pollutant (lb/hr)	D Load-out & Silo Filling Rate for Pollutant (lb/hr)	E TOTAL of Max Emission Rates from A, B, C & D (lb/hr)
PAH HAPs						PAH HAPs					
2-Methylnaphthalene	6.78E-04	0.00E+00	0.00E+00	1.96E-04	8.72E-04	2-Methylnaphthalene	6.78E-04	0.00E+00	0.00E+00	1.96E-04	8.72E-04
3-Methylchloanthrene*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3-Methylchloanthrene*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acenaphthene	1.28E-05	0.00E+00	0.00E+00	1.90E-05	3.18E-05	Acenaphthene	1.28E-05	0.00E+00	0.00E+00	1.90E-05	3.18E-05
Acenaphthylene	7.85E-05	0.00E+00	0.00E+00	1.20E-06	7.97E-05	Acenaphthylene	7.85E-05	0.00E+00	0.00E+00	1.20E-06	7.97E-05
Anthracene	2.01E-06	0.00E+00	0.00E+00	5.19E-06	7.20E-06	Anthracene	2.01E-06	0.00E+00	0.00E+00	5.19E-06	7.20E-06
Benzo(a)anthracene*	1.92E-06	0.00E+00	0.00E+00	1.89E-06	3.81E-06	Benzo(a)anthracene*	1.92E-06	0.00E+00	0.00E+00	1.89E-06	3.81E-06
Benzo(a)pyrene*	8.95E-08	0.00E+00	0.00E+00	7.16E-08	1.61E-07	Benzo(a)pyrene*	8.95E-08	0.00E+00	0.00E+00	7.16E-08	1.61E-07
Benzo(b)fluoranthene*	9.13E-07	0.00E+00	0.00E+00	2.37E-07	1.15E-06	Benzo(b)fluoranthene*	9.13E-07	0.00E+00	0.00E+00	2.37E-07	1.15E-06
Benzo(e)pyrene	1.00E-06	0.00E+00	0.00E+00	4.63E-07	1.47E-05	Benzo(e)pyrene	1.00E-06	0.00E+00	0.00E+00	4.63E-07	1.47E-05
Benzo(g,h,i)perylene	3.85E-07	0.00E+00	0.00E+00	5.92E-08	4.24E-07	Benzo(g,h,i)perylene	3.85E-07	0.00E+00	0.00E+00	5.92E-08	4.24E-07
Benzo(k)fluoranthene*	3.74E-07	0.00E+00	0.00E+00	6.85E-08	4.43E-07	Benzo(k)fluoranthene*	3.74E-07	0.00E+00	0.00E+00	6.85E-08	4.43E-07
Chrysene*	1.54E-06	0.00E+00	0.00E+00	8.08E-06	9.72E-06	Chrysene*	1.54E-06	0.00E+00	0.00E+00	8.08E-06	9.72E-06
Dibenz(a,h)anthracene*	0.00E+00	0.00E+00	0.00E+00	1.15E-08	1.15E-08	Dibenz(a,h)anthracene*	0.00E+00	0.00E+00	0.00E+00	1.15E-08	1.15E-08
Dichlorobenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Dichlorobenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fluoranthene	5.57E-06	0.00E+00	0.00E+00	5.03E-06	1.06E-05	Fluoranthene	5.57E-06	0.00E+00	0.00E+00	5.03E-06	1.06E-05
Fluorene	3.47E-05	0.00E+00	0.00E+00	4.74E-05	8.21E-05	Fluorene	3.47E-05	0.00E+00	0.00E+00	4.74E-05	8.21E-05
Indeno(1,2,3-cd)pyrene*	6.39E-08	0.00E+00	0.00E+00	1.46E-08	7.88E-08	Indeno(1,2,3-cd)pyrene*	6.39E-08	0.00E+00	0.00E+00	1.46E-08	7.88E-08
Naphthalene*	8.22E-04	0.00E+00	0.00E+00	8.11E-05	9.03E-04	Naphthalene*	8.22E-04	0.00E+00	0.00E+00	8.11E-05	9.03E-04
Perylene	8.04E-08	0.00E+00	0.00E+00	1.38E-08	1.46E-06	Perylene	8.04E-08	0.00E+00	0.00E+00	1.38E-08	1.46E-06
Phenanthrene	1.94E-05	0.00E+00	0.00E+00	6.70E-05	1.39E-04	Phenanthrene	1.94E-05	0.00E+00	0.00E+00	6.70E-05	1.39E-04
Pyrene	4.93E-06	0.00E+00	0.00E+00	1.49E-05	1.98E-05	Pyrene	4.93E-06	0.00E+00	0.00E+00	1.49E-05	1.98E-05
Non-HAP Organic Compounds						Non-HAP Organic Compounds					
Acetone*	0.00E+00	0.00E+00	0.00E+00	5.62E-04	5.62E-04	Acetone*	0.00E+00	0.00E+00	0.00E+00	5.62E-04	5.62E-04
Benzaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Benzaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Butane	0.00E+00	0.00E+00	0.00E+00	4.36E-02	4.36E-02	Butane	0.00E+00	0.00E+00	0.00E+00	4.36E-02	4.36E-02
Butylaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Butylaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Crotonaldehyde*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Crotonaldehyde*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethylene	4.55E-01	0.00E+00	0.00E+00	1.08E-02	4.66E-01	Ethylene	4.55E-01	0.00E+00	0.00E+00	1.08E-02	4.66E-01
Heptane	8.11E-01	0.00E+00	0.00E+00	0.00E+00	8.11E-01	Heptane	8.11E-01	0.00E+00	0.00E+00	0.00E+00	8.11E-01
Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Isovaleraldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Isovaleraldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2-Methyl-1-pentene	2.60E-01	0.00E+00	0.00E+00	0.00E+00	2.60E-01	2-Methyl-1-pentene	2.60E-01	0.00E+00	0.00E+00	0.00E+00	2.60E-01
2-Methyl-2-butene	3.77E-02	0.00E+00	0.00E+00	0.00E+00	3.77E-02	2-Methyl-2-butene	3.77E-02	0.00E+00	0.00E+00	0.00E+00	3.77E-02
3-Methylpentane	1.24E-02	0.00E+00	0.00E+00	0.00E+00	1.24E-02	3-Methylpentane	1.24E-02	0.00E+00	0.00E+00	0.00E+00	1.24E-02
1-Pentene	1.43E-01	0.00E+00	0.00E+00	0.00E+00	1.43E-01	1-Pentene	1.43E-01	0.00E+00	0.00E+00	0.00E+00	1.43E-01
n-Pentane	1.37E-02	0.00E+00	0.00E+00	0.00E+00	1.37E-02	n-Pentane	1.37E-02	0.00E+00	0.00E+00	0.00E+00	1.37E-02
Valeraldehyde*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Valeraldehyde*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Metals						Metals					
Antimony*	1.17E-05	0.00E+00	0.00E+00	0.00E+00	1.17E-05	Antimony*	1.17E-05	0.00E+00	0.00E+00	0.00E+00	1.17E-05
Arsenic*	5.11E-06	0.00E+00	0.00E+00	0.00E+00	5.11E-06	Arsenic*	5.11E-06	0.00E+00	0.00E+00	0.00E+00	5.11E-06
Barium*	3.77E-04	0.00E+00	0.00E+00	0.00E+00	3.77E-04	Barium*	3.77E-04	0.00E+00	0.00E+00	0.00E+00	3.77E-04
Beryllium*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Beryllium*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium*	3.74E-06	0.00E+00	0.00E+00	0.00E+00	3.74E-06	Cadmium*	3.74E-06	0.00E+00	0.00E+00	0.00E+00	3.74E-06
Chromium*	3.58E-04	0.00E+00	0.00E+00	0.00E+00	3.58E-04	Chromium*	3.58E-04	0.00E+00	0.00E+00	0.00E+00	3.58E-04
Cobalt*	1.89E-06	0.00E+00	0.00E+00	0.00E+00	1.89E-06	Cobalt*	1.89E-06	0.00E+00	0.00E+00	0.00E+00	1.89E-06
Copper*	2.02E-04	0.00E+00	0.00E+00	0.00E+00	2.02E-04	Copper*	2.02E-04	0.00E+00	0.00E+00	0.00E+00	2.02E-04
Hexavalent Chromium*	4.11E-06	0.00E+00	0.00E+00	0.00E+00	4.11E-06	Hexavalent Chromium*	4.11E-06	0.00E+00	0.00E+00	0.00E+00	4.11E-06
Manganese*	5.01E-04	0.00E+00	0.00E+00	0.00E+00	5.01E-04	Manganese*	5.01E-04	0.00E+00	0.00E+00	0.00E+00	5.01E-04
Niobium*	1.56E-05	0.00E+00	0.00E+00	0.00E+00	1.56E-05	Niobium*	1.56E-05	0.00E+00	0.00E+00	0.00E+00	1.56E-05
Nickel*	5.75E-04	0.00E+00	0.00E+00	0.00E+00	5.75E-04	Nickel*	5.75E-04	0.00E+00	0.00E+00	0.00E+00	5.75E-04
Phosphorus*	1.82E-03	0.00E+00	0.00E+00	0.00E+00	1.82E-03	Phosphorus*	1.82E-03	0.00E+00	0.00E+00	0.00E+00	1.82E-03
Silver*	3.12E-05	0.00E+00	0.00E+00	0.00E+00	3.12E-05	Silver*	3.12E-05	0.00E+00	0.00E+00	0.00E+00	3.12E-05
Selenium*	2.28E-05	0.00E+00	0.00E+00	0.00E+00	2.28E-05	Selenium*	2.28E-05	0.00E+00	0.00E+00	0.00E+00	2.28E-05
Thallium*	2.67E-07	0.00E+00	0.00E+00	0.00E+00	2.67E-07	Thallium*	2.67E-07	0.00E+00	0.00E+00	0.00E+00	2.67E-07
Vanadium*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Vanadium*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zinc*	3.97E-03	0.00E+00	0.00E+00	0.00E+00	3.97E-03	Zinc*	3.97E-03	0.00E+00	0.00E+00	0.00E+00	3.97E-03

e) IDAPA Toxic Air Pollutant

Criteria Pollutant lb/hr emissions are maximum 1-hr averages  
 TAPs lb/hr rates are 24-hr averages except for those in bold text. Lb/hr rates for bold TAPs (carcinogens) are annual averages.  
 Pollutants shown in blue text are emitted only when burning Used Oil, but not when burning #2 Fuel Oil or Natural Gas

Max Controlled Emissions of Any Pollutant from Drum Mix HMA Plant Fabric Filter, Tank Heater, Generator, Silo Filling/Load-out  
 A. Drum Mix Plant: 190 Tons/year 615 Hours/year  
 Maximum emission for each pollutant from any fuel-burning option selected. Fuels Selected = Natural Gas  
 B. Tank Heater: 0.000 MMBtu/hr 4,000 Hours/year  
 Maximum emission for each pollutant from any fuel-burning option selected. Fuels Selected = Natural Gas  
 C1. IC Engine 1: 0.00 gal/hour 0 Hours/year  
 C2. IC Engine 2: 0.00 gal/hour 0 Hours/year  
 #2 Fuel Oil Generator < 600hp  
 #2 Fuel Oil Generator > 600hp

Pollutant	A Drum Mix Max Emission Rate for Pollutant (lb/hr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (lb/hr)	C IC Engine Max Emission Rate for Pollutant (lb/hr)	D Load-out & Silo Filling Rate for Pollutant (lb/hr)	E TOTAL of Max Emission Rates from A, B, C & D (lb/hr)
non-PAH HAPs*					
Bromothane*				6.48E-05	6.48E-05
2-Butanone (see Methyl Ethyl Ketone)					
Carbon disulfide*				1.62E-04	1.62E-04
Chloroethane (Ethyl chloride)*				3.23E-05	3.23E-05
Chloromethane (Methyl chloride)*				2.23E-04	2.23E-04
Cumene				2.97E-04	2.97E-04
n-Hexane					
Methylene chloride (Dichloromethane)*				2.14E-06	2.14E-06
MTBE					
Styrene*				6.25E-05	6.25E-05
Tetrachloroethane (Tetrachloroethylene)*				2.08E-05	2.08E-05
1,1,1-Trichloroethane (Methyl chloroform)*					
Trichloroethene (Trichloroethylene)*				3.51E-06	3.51E-06
Trichlorofluoromethane				2.69E-03	2.69E-03
m-Xylene*				2.61E-03	2.61E-03
o-Xylene*				2.61E-04	2.61E-04
Phenol*				2.61E-04	2.61E-04
Non-HAP Organic Compounds					
Methane				2.24E-01	2.24E-01

e) IDAPA Toxic Air Pollutant

TAPs lb/hr rates are 24-hr averages except for those in bold text. Lb/hr rates for bold TAPs (carcinogens) are annual averages.

Facility: C. Wright Construction, Inc.  
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**EMISSION INVENTORY**  
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Max Controlled Emissions of Any Pollutant from Drum Mix HMA Plant Fabric Filter, Tank Heater, Generator, Silo Fill/Load-out

A. Drum Mix Plant: 190 Tons/year 615 Hours/year 80,000 Tons/year HMA throughout  
 Maximum emission for each pollutant from any fuel-burning option selected on "Facility Data" worksheet. Fuels Selected =  
 B. Tank Heater: 0.0000 MMBtu/hr 4,000 Hours/year  
 Maximum emission for each pollutant from any fuel-burning option selected on "Facility Data" worksheet. Fuels Selected =  
 C1, IC Engine 1: 0.00 gal/hour 0 Hours/year IC Engine <600hp  
 C2, IC Engine 2: 0.00 gal/hour 0 Hours/year IC Engine >600hp

Pollutant	A		B		C		D		E POINT	
	Drum Mix Max Emission Rate for Pollutant (T/yr)	Asphalt Tank Heater Max Emission Rate for Pollutant (T/yr)	IC Engine IC1 + IC2 Max Emission Rate for Pollutant (T/yr)	IC Engine IC1 + IC2 Max Emission Rate for Pollutant (T/yr)	Load-out & Silo Filling, Emission Rate for Pollutant (T/yr)	Load-out & Silo Filling, Emission Rate for Pollutant (T/yr)	IC Engine <600hp Max Emission Rate for Pollutant (T/yr)	IC Engine >600hp Max Emission Rate for Pollutant (T/yr)	SOURCE TOTAL of Max Emission Rates from A, B, & C (T/yr)	Exclude Fugitives (D)
PM (total)										
PM-10 (total)	1.49	0.00E+00	0.00E+00	0.00E+00	4.43E-02				1.49	
PM-2.5	1.49	0.00E+00	0.00E+00	0.00E+00	4.43E-02				1.49	
CO	5.20	0.00E+00	0.00E+00	0.00E+00	1.01E-01			5.20		
NOx	1.04	0.00E+00	0.00E+00	0.00E+00				1.04		
SOx	0.14	0.00E+00	0.00E+00	0.00E+00				0.14		
VOC	1.28	0.00E+00	0.00E+00	0.00E+00	1.61E-01			1.28		
Lead	2.48E-05	0.00E+00	0.00E+00	0.00E+00				2.48E-05		
HCl <sup>1</sup>	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Dioxins*										
2,3,7,8-TCDD	0.00E+00							0.00E+00		
Total TCDD	0.00E+00							0.00E+00		
1,2,3,7,8-PeCDD	0.00E+00							0.00E+00		
Total PCDD	0.00E+00							0.00E+00		
1,2,3,4,7,8-HxCDD	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
1,2,3,6,7,8-HxCDD	0.00E+00							0.00E+00		
1,2,3,7,8,9-HxCDD	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Total HxCDD	0.00E+00							0.00E+00		
1,2,3,4,6,7,8-HpCDD	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Total HpCDD	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
CenCDD	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Total PCDD <sup>2</sup>	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Furans*										
2,3,7,8-TCDF	0.00E+00							0.00E+00		
Total TCDF	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
1,2,3,7,8-PeCDF	0.00E+00							0.00E+00		
2,3,4,7,8-PeCDF	0.00E+00							0.00E+00		
Total PeCDF	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
1,2,3,4,7,8-HxCDF	0.00E+00							0.00E+00		
1,2,3,6,7,8-HxCDF	0.00E+00							0.00E+00		
2,3,4,6,7,8-HxCDF	0.00E+00							0.00E+00		
1,2,3,7,8,9-HxCDF	0.00E+00							0.00E+00		
Total HxCDF	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
1,2,3,4,6,7,8-HpCDF	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
1,2,3,4,7,8,9-HpCDF	0.00E+00							0.00E+00		
Total HpCDF	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
CenCDF	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Total PCDF <sup>2</sup>	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Total PCDD/PCDF <sup>3</sup>	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Non-PAH HAPs										
Acetaldehyde <sup>4</sup>	0.00E+00		0.00E+00	0.00E+00				0.00E+00		
Acrolein <sup>4</sup>	0.00E+00		0.00E+00	0.00E+00				0.00E+00		
Benzene <sup>4</sup>	1.56E-02	0.00E+00	0.00E+00	0.00E+00	2.42E-04	1.56E-02		0.00E+00		
1,3-Butadiene <sup>4</sup>	0.00E+00		0.00E+00	0.00E+00				0.00E+00		
Ethylbenzene <sup>4</sup>	9.60E-03				6.51E-04	9.60E-03		0.00E+00		
Formaldehyde <sup>4</sup>	1.24E-01	0.00E+00	0.00E+00	0.00E+00	3.51E-03	1.24E-01		0.00E+00		
Hexane <sup>4</sup>	3.68E-02	0.00E+00			7.37E-04	3.68E-02		0.00E+00		
Isooctane <sup>4</sup>	1.80E-03				4.51E-06	1.80E-03		0.00E+00		
Methyl Ethyl Ketone <sup>4</sup>	0.00E+00				2.72E-04	0.00E+00		0.00E+00		
Pentane <sup>4</sup>	0.00E+00	0.00E+00	0.00E+00	0.00E+00				0.00E+00		
Propionaldehyde <sup>4</sup>	0.00E+00							0.00E+00		
Quinone <sup>4</sup>	0.00E+00							0.00E+00		
Methyl chloroform <sup>4</sup>	1.82E-03					1.82E-03		0.00E+00		
Toluene <sup>4</sup>	6.00E-03	0.00E+00	0.00E+00	0.00E+00	6.52E-04	6.00E-03		0.00E+00		
Xylene <sup>4</sup>	8.00E-03	0.00E+00	0.00E+00	0.00E+00	3.27E-03	8.00E-03		0.00E+00		
TOTAL Federal HAPs (T/yr) <sup>5</sup>						2.18E-01				

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**EMISSION INVENTORY**  
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Max Controlled Emissions of Any Pollutant from Drum Mix HMA Plant Fabric Filter, Tank Heater, Generator, Silo Fill/Load-out

A. Drum Mix Plant: 190 Tons/year 615 Hours/year 80,000 Tons/year  
 Maximum emission for each pollutant from any fuel-burning option selected. Fuels Selected = Natural Gas  
 B. Tank Heater: 0.0000 MMBtu/hr 4,000 Hours/year  
 Maximum emission for each pollutant from any fuel-burning option selected. Fuels Selected =  
 C1, Generator G1: 0.00 gal/hour 0 Hours/year IC Engine <600hp  
 C2, Generator G2: 0.00 gal/hour 0 Hours/year IC Engine >600hp

Pollutant	A		B		C		D		E POINT	
	Drum Mix Max Emission Rate for Pollutant (T/yr)	Asphalt Tank Heater Max Emission Rate for Pollutant (T/yr)	Generator Max Emission Rate for Pollutant (T/yr)	Generator Max Emission Rate for Pollutant (T/yr)	Lead-out, Silo Filling, & Tank Storage Emission Rate for Pollutant (T/yr)	Lead-out, Silo Filling, & Tank Storage Emission Rate for Pollutant (T/yr)	IC Engine <600hp Max Emission Rate for Pollutant (T/yr)	IC Engine >600hp Max Emission Rate for Pollutant (T/yr)	SOURCE TOTAL of Max Emission Rates from A, B, & C (T/yr)	Exclude Fugitives (D)
non-PAH HAPs <sup>4</sup>										
Bromomethane <sup>4</sup>									3.99E-05	0.00E+00
2-Butanone (see Methyl Ethyl Ketone)										0.00E+00
Carbon disulfide <sup>4</sup>									9.98E-05	0.00E+00
Chloroethane (Ethyl chloride) <sup>4</sup>									1.98E-05	0.00E+00
Chloromethane (Methyl chloride) <sup>4</sup>									1.37E-04	0.00E+00
Cumene <sup>4</sup>									1.83E-04	0.00E+00
n-Hexane <sup>4</sup>									0.00E+00	0.00E+00
Methylene chloride (Dichloromethane) <sup>4</sup>									1.32E-06	0.00E+00
MTBE <sup>4</sup>									0.00E+00	0.00E+00
Styrene <sup>4</sup>									3.85E-05	0.00E+00
Tetrahydroethene (Tetrahydroethylene) <sup>4</sup>									1.29E-05	0.00E+00
1,1,1-Trichloroethane (Methyl chloroform) <sup>4</sup>									0.00E+00	0.00E+00
Trichloroethene (Trichloroethylene) <sup>4</sup>									0.00E+00	0.00E+00
Trichlorofluoromethane <sup>4</sup>									2.16E-06	0.00E+00
m,p-Xylene <sup>4</sup>									1.66E-03	0.00E+00
o-Xylene <sup>4</sup>									1.61E-03	0.00E+00
Phenol <sup>4</sup>									1.61E-04	0.00E+00
Non-HAP Organic Compounds										
Methane									1.38E-01	0.00E+00
a) IDAPA Toxic Air Pollutant										

Facility: C. Wright Construction, Inc.  
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**TAPs EL Screen - ALL SOURCES**  
 586 pollutants are shown in bold Page 1 of 2

Max Emissions of Any Pollutant from Drum Mix HMA Plant Fabric Filter, Tank Heater, Silo Fill/Load-out - Generator not included  
 A. Drum Mix Plant: 130 Tons/hour 615 Hours/year 80,000 Tons/year 1,560 Tons/day

B. Tank Heater: 0.000 MMBtu Rated 4,000 Hours/year  
 Maximum emission for each pollutant for heater burning any fuel selected on "Facility Data" worksheet  
 C1. IC Engine G1: 0.00 gal/hour 0 Hours/year IC Engine <600hp #2 Fuel Oil 0 hrs/day  
 C2. IC Engine G2: 0.00 gal/hour 0 Hours/year IC Engine > 600hp #2 Fuel Oil 0 hrs/day

**D. Include all emissions from Load-out/Silo Filling? Yes**  
Small Term Sources Factor 0.98 ELs?

Pollutant	TOTAL of Max Emission Rates from A, B, & D (lb/hr)	TAPs Screening Emission Limit (EL) Increment <sup>b</sup> (lb/hr)	TAPs Emissions Exceed EL Increment?	Modeled? Meets AAC or AACQ?
PAH HAPs				
2-Methylnaphthalene	8.72E-04	9.10E-05	Exceeds	
3-Methylchloranthrene	0.00E+00	2.50E-06	No	
Acenaphthene	3.18E-05	9.10E-05	No	
Acenaphthylene	7.97E-05	9.10E-05	No	
Anthracene	7.20E-08	9.10E-05	No	
Benzo(a)anthracene	3.81E-06			see POM
Benzo(a)pyrene	1.61E-07	2.00E-06	No	see POM
Benzo(b)fluoranthene	1.15E-06			see POM
Benzo(e)pyrene	1.47E-06	9.10E-05	No	
Benzo(g,h)perylene	4.24E-07	9.10E-05	No	
Benzofluoranthene	4.47E-07			see POM
Chrysene	9.72E-06			see POM
Dibenz(a,h)anthracene	1.15E-08			see POM
Dichlorobenzene	0.00E+00	9.10E-05	No	
Fluoranthene	1.06E-05	9.10E-05	No	
Fluorene	8.21E-05	9.10E-05	No	
Indeno(1,2,3-cd)pyrene	7.89E-08			see POM
Naphthalene <sup>a</sup>	9.03E-04	9.10E-05	Exceeds	
Perylene	1.46E-06	9.10E-05	No	
Phenanthrene	1.36E-04	9.10E-05	Exceeds	
Pyrene	1.98E-05	9.10E-05	No	
PolycyclicOrganicMatter <sup>d</sup>	1.54E-05	2.00E-08	Exceeds	
Non-HAP Organic Compounds				
Acetone	5.62E-04	119	No	
Benzaldehyde	0.00E+00			
Butane	4.96E-02			
Butylaldehyde	0.00E+00			
Crotonaldehyde	0.00E+00	0.38	No	
Ethylene	4.86E-01			
Heptane	6.11E-01	109	No	
Hexanal	0.00E+00			
Isovaleraldehyde	0.00E+00			
2-Methyl-1-pentene	2.60E-01			
2-Methyl-2-butene	3.77E-02			
3-Methylpentane	1.24E-02			
1-Pentene	1.43E-01			
n-Pentane <sup>e</sup>	1.37E-02	118	No	
Valeraldehyde (n-Valeraldehyde)	0.00E+00	11.7	No	
Metals				
Antimony <sup>f</sup>	1.17E-05	0.033	No	
Arsenic	5.11E-08	1.50E-06	Exceeds	
Barium	3.77E-04	0.033	No	
Beryllium	0.00E+00	2.80E-05	No	
Cadmium	3.74E-06	3.70E-06	Exceeds	
Chromium	3.58E-04	0.033	No	
Cobalt	1.68E-06	0.0033	No	
Copper	2.02E-04	0.013	No	
Hexavalent Chromium	4.11E-06	5.60E-07	Exceeds	
Manganese	5.01E-04	0.067	No	
Mercury	1.56E-05	0.003	No	
Molybdenum	0.00E+00	0.333	No	
Nickel	5.79E-04	2.70E-05	Exceeds	
Phosphorus	1.82E-03	0.007	No	
Silver	3.12E-05	0.007	No	
Selenium	2.28E-05	0.013	No	
Thallium	2.67E-07	0.007	No	
Vanadium	0.00E+00	0.003	No	
Zinc	3.97E-03	0.667	No	

a) Reserved.  
 b) Toxic Air Pollutants, IDAPA 58.01.01.585 and .586, levels in effect as of February 25, 2009  
 c) 2005, Van den Berg, et al, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds, *Toxicological Sciences* 93(2), 223-241 (2006), Accessible at <http://toxsci.oxfordjournals.org/cgi/repint/93/2/223>.  
 Use of the 2005 WHO toxic equivalency factors (TEFs) is consistent with current EPA recommendations for TRI reporting (72 FR 26544, May 10, 2007)  
 n/a = not available. IDAPA 58.01.01.586, TAPs Carcinogenic Increments: Total of adjusted emission rates are treated as a single TAP (2,3,7,8-TCDD)  
 d) IDAPA 58.01.01.586, Polycyclic Organic Matter: Emissions of highlighted PAHs shall be considered together as one TAP equivalent in potency to benzo(a)pyrene.  
 e) Naphthalene is listed as a noncarcinogenic TAP in IDAPA 58.01.01.585 (EL = 3.33 lb/hr), but must also be considered as a carcinogenic PAH (EL = 9.10E-05 lb/hr)  
 TAPs lb/hr rates are 24-hr averages except for those in bold text. Lb/hr rates for bold TAPs (carcinogens) are annual averages.  
 Pollutants shown in blue text are emitted only when burning Used Oil, but not when burning #2 Fuel Oil or Natural Gas

Facility: C. Wright Construction, Inc.  
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**TAPs EL Screen - ALL SOURCES**  
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Max Emissions of Any Pollutant from Drum Mix HMA Plant Fabric Filter, Tank Heater, Silo Fill/Load-out - Generator not included  
 A. Drum Mix Plant: 130 Tons/hour 615 Hours/year 80,000 Tons/year 1,560 Tons/day

B. Tank Heater: 0.000 MMBtu Rated 4,000 Hours/year  
 Maximum emission for each pollutant for heater burning any fuel selected in "Facility Data" worksheet  
 C1. IC Engine G1: 0.00 gal/hour 0 Hours/year #2 Fuel Oil 0 hrs/day  
 C2. IC Engine G2: 0.00 gal/hour 0 Hours/year #2 Fuel Oil 0 hrs/day

**D. Include all emissions from Load-out/Silo Filling? Yes**

Pollutant	TOTAL of Max Emission Rates from A, B, & D (lb/hr)	TAPs Screening Emission Limit (EL) Increment <sup>b</sup> (lb/hr)	TAPs Emissions Exceed EL Increment?	Modeled?
non-PAH HAPs <sup>a</sup>				
Bromomethane (Methyl bromide <sup>a</sup> )		6.48E-05	1.27	No
2-Butanone (see Methyl Ethyl Ketone)				
Carbon disulfide <sup>a</sup>	1.62E-04		2	No
Chloroethane (Ethyl chloride <sup>a</sup> )	3.23E-05		176	No
Chloromethane (Methyl chloride <sup>a</sup> )	2.23E-04		6,867	No
Cumene <sup>a</sup>	2.97E-04		16.3	No
n-Hexane <sup>a</sup> (see Hexano <sup>a</sup> )				
Methylene chloride (Dichloromethane <sup>a</sup> )	2.14E-06	1.60E-03		No
MTBE	0.00E+00			
Styrene <sup>a</sup>	6.29E-06		6.67	No
Tetrachloroethane (Tetrachloroethylene <sup>a</sup> )	2.08E-05	1.30E-02		No
1,1,1-Trichloroethane (see Methyl chloroform <sup>a</sup> )				
Trichloroethane (Trichloroethylene <sup>a</sup> )	0.00E+00		17.93	No
Trichlorofluoromethane	3.51E-06			
m/p-Xylene <sup>a</sup> (added into Xylene <sup>a</sup> )				
o-Xylene <sup>a</sup> (added into Xylene <sup>a</sup> )				
Phenol <sup>a</sup>	2.61E-04	1.27	No	
Non-HAP Organic Compounds				
Methane	2.24E-01			

a) For HMA facilities subject to NSPS (40 CFR 60, Subpart 1), PTE includes fugitive emissions of PM from load-out, silo filling & storage tank operations.  
 IDAPA Toxic Air Pollutant, 58.01.01.585 or .586

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**TAPS INCREMENT - ALL SOURCES**  
 586 pollutants are shown in bold Page 1 of 2

Facility: C. Wright Construction, Inc.  
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**TAPs Increment - ALL SOURCES**  
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Max Emissions of Any Pollutant from Drum Mix HMA Plant Fabric Filter, Tank Heater, Silo Fill/Load-out - Generator not included  
 A. Drum Mix Plant: 130 Tons/year 615 Hours/year 80,000 Tons/year 1,560 Tons/day  
 Maximum emission for each pollutant from any fuel-burning option selected in "Facility Data" worksheet

B. Tank Heater: 0.000 MMBtu Rated 4,000 Hours/year  
 Maximum emission for each pollutant for heater burning any fuel selected on "Facility Data" worksheet  
 C1. IC Engine G1: 0.00 gal/hour 0 Hours/year  
 C2. IC Engine G2: 0.00 gal/hour 0 Hours/year

D. Include all emissions from Load-out/Silo Filling? Yes  
 Short Term Emission Factor per EL5

Pollutant	TOTAL of Max Emission Rates from A, B, & D (lb/hr)	TAPS Screening Emission Limit (EL) Increment <sup>a</sup> (lb/hr)	TAPS Emissions Exceeded EL Increment?	Modeled? Meets AAC or AAC?
<b>HCl<sup>b</sup></b>	0.000	0.05	No	
<b>Dioxins</b>		Toxic Equivalency Factor <sup>c</sup>	Adjusted Emission Rate (lb/hr)	
2,3,7,8-TCDD	0.00E+00	1.0	0.00E+00	
Total TCDD	0.00E+00	n/a		
1,2,3,7,8-PeCDD	0.00E+00	1.0	0.00E+00	
Total PCDD	0.00E+00	n/a		
1,2,3,4,7,8-HxCDD	0.00E+00	0.1	0.00E+00	
1,2,3,6,7,8-HxCDD	0.00E+00	0.1	0.00E+00	
1,2,3,7,8,9-HxCDD	0.00E+00	0.1	0.00E+00	
Total HxCDD	0.00E+00	n/a		
1,2,3,4,6,7,8-HpCDD	0.00E+00	0.01	0.00E+00	
Total HCDD	0.00E+00	n/a		
Octa CDD	0.00E+00	0.0003	0.00E+00	
Total PCDD	0.00E+00	n/a		
<b>Furans</b>				
2,3,7,8-TCDF	0.00E+00	0.1	0.00E+00	
Total TCDF	0.00E+00	n/a		
1,2,3,7,8-PeCDF	0.00E+00	0.03	0.00E+00	
2,3,4,7,8-PeCDF	0.00E+00	0.3	0.00E+00	
Total PeCDF	0.00E+00	n/a		
1,2,3,4,7,8-HxCDF	0.00E+00	0.1	0.00E+00	
1,2,3,5,6,7,8-HxCDF	0.00E+00	0.1	0.00E+00	
2,3,4,6,7,8-HxCDF	0.00E+00	0.1	0.00E+00	
1,2,3,7,8,9-HxCDF	0.00E+00	0.1	0.00E+00	
Total HxCDF	0.00E+00	n/a		
1,2,3,4,6,7,8-HpCDF	0.00E+00	0.01	0.00E+00	
1,2,3,4,7,8,9-HpCDF	0.00E+00	0.01	0.00E+00	
Total HpCDF	0.00E+00	n/a		
Octa CDF	0.00E+00	0.0003	0.00E+00	
Total PCDF	0.00E+00	n/a		
Total PCDD/PCDF	0.00E+00	n/a		
<b>TOTAL Dioxin/Furans<sup>d</sup></b>	<b>Adjusted lb/hr</b>	<b>TAPS EL for 2,3,7,8 TCDD</b>	<b>Exceeds TAPS EL?</b>	<b>Modeled?</b>
Non-PAH HAPs	0.00E+00	1.50E-10	No	
Acetaldehyde	0.00E+00	3.00E-03	No	
Acrolein	0.00E+00	0.017	No	
Benzene	0.00E+00	8.00E-04	No	
1,3-Butadiene	0.00E+00			
Ethylbenzene	0.00E+00	29	No	
Formaldehyde	0.00E+00	5.10E-04	No	
Hexane	1.13E-02	12	No	
Isooctane	4.81E-04			
Methyl Ethyl Ketone	8.15E-05	39.3	No	
Pentane	0.00E+00	118	No	
Propionaldehyde	0.00E+00	0.0287	No	
Quinone	0.00E+00	0.027	No	
Methyl chloroform	5.76E-04	127	No	
Toluene	2.00E-03	25	No	
Xylene	3.38E-03	29	No	

a) Reserved.  
 b) Toxic Air Pollutants, IDAPA 58.01.01.585 and .586, levels in effect as of February 25, 2009  
 c) 2005. Van den Berg, et al. The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds. *Toxicological Sciences* 93(2), 223-241 (2006). Accessible at <http://toxsci.oxfordjournals.org/cgi/rapidlink/93/2/223>.  
 Use of the 2005 WHO toxic equivalency factors (TEFs) is consistent with current EPA recommendations for TRI reporting (72 FR 26544, May 10, 2007)  
 n/a = not available. IDAPA 58.01.01.586, TAPS Carcinogenic Increments: Total of adjusted emission rates are treated as a single TAP (2,3,7,8 TCDD)  
 d) IDAPA 58.01.01.586, Polycyclic Organic Matter: Emissions of highlighted PAHs shall be considered together as one TAP equivalent in potency to benzo(a)pyrene.  
 e) Naphthalene is listed as a noncarcinogenic TAP in IDAPA 58.01.01.585 (EL = 3.33 lb/hr), but must also be considered as a carcinogenic PAH (EL = 9.10E-05 lb/hr)  
 TAPS lb/hr rates are 24-hr averages except for those in bold text. Lb/hr rates for bold TAPS (carcinogens) are annual averages.  
 Pollutants shown in blue text are emitted only when burning Used Oil, but not when burning #2 Fuel Oil or Natural Gas  
 TAPS from the IC engines are not included in this summary. They are regulated by a NESHAP/NSPS and not to be included in the TAPS analysis

Max Emissions of Any Pollutant from Drum Mix HMA Plant Fabric Filter, Tank Heater, Silo Fill/Load-out - Generator not included  
 A. Drum Mix Plant: 130 Tons/year 615 Hours/year 80,000 Tons/year 1,560 Tons/day  
 Maximum emission for each pollutant from any fuel-burning option selected in "Facility Data" worksheet

B. Tank Heater: 0.000 MMBtu Rated 4,000 Hours/year  
 Maximum emission for each pollutant for heater burning any fuel selected in "Facility Data" worksheet  
 C1. IC Engine G1: 0.00 gal/hour 0 Hours/year  
 C2. IC Engine G2: 0.00 gal/hour 0 Hours/year

D. Include all emissions from Load-out/Silo Filling? Yes

Pollutant	TOTAL of Max Emission Rates from A, B, & D (lb/hr)	TAPS Screening Emission Limit (EL) Increment <sup>a</sup> (lb/hr)	TAPS Emissions Exceeded EL Increment?	Modeled?
non-PAH HAPs <sup>a</sup>				
Bromomethane (Methyl bromide) <sup>b</sup>	1.20E-05	1.27	No	
2-Butanone (see Methyl Ethyl Ketone)				
Carbon disulfide <sup>c</sup>	2.99E-05	2	No	
Chloroethane (Ethyl chloride) <sup>b</sup>	5.95E-06	176	No	
Chloromethane (Methyl chloride) <sup>b</sup>	4.11E-05	6.867	No	
Cumene <sup>d</sup>	5.49E-05	16.3	No	
n-Hexane <sup>e</sup> (see Hexane <sup>f</sup> )				
Methylene chloride (Dichloromethane) <sup>g</sup>	3.95E-07	1.60E-03	No	
MTBE	0.00E+00			
Styrene <sup>h</sup>	1.15E-05	6.67	No	
Tetrachloroethane (Tetrachloroethylene) <sup>i</sup>	3.84E-08	1.30E-02	No	
1,1,1-Trichloroethane (see Methyl chloroform <sup>j</sup> )				
Trichloroethane (Trichloroethylene) <sup>k</sup>	0.00E+00	17.93	No	
Trichlorofluoromethane	6.49E-07			
m-p-Xylene <sup>l</sup> (added into Xylene <sup>m</sup> )				
o-Xylene <sup>n</sup> (added into Xylene <sup>m</sup> )	4.83E-05	1.27	No	
Pheno <sup>o</sup>				
Non-HAP Organic Compounds				
Methane	4.13E-02			

a) For HMA facilities subject to NSPS (40 CFR 60, Subpart I), PTE includes fugitive emissions of PM from load-out, silo filling & storage tank operations.  
 b) IDAPA Toxic Air Pollutant, 58.01.01.585 or .586

## APPENDIX B – REGULATORY ANALYSES FOR 40 CFR 60 SUBPART I

NSPS / NESHAP Regulation Review and Applicability form FRA.

### **§ 60.90 Applicability and designation of affected facility.**

**(a)** The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.

**(b)** Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

[42 FR 37936, July 25, 1977, as amended at 51 FR 12325, Apr. 10, 1986]

**C. Wright Construction, Inc. plans to upgrade, after June 11 1973, its HMA facility. Therefore, C. Wright Construction, Inc. is affected by this Subpart.**

**The upgrades increase the dryer's production rate from 106 T/hr to 130 T/hr, and therefore increase the PM emissions in lb/hr from the dryer and other affected sources.**

### **§ 60.91 Definitions.**

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

**(a) Hot mix asphalt facility** means any facility, as described in § 60.90, used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.

[51 FR 12325, Apr. 10, 1986]

**C. Wright Construction, Inc. is subject and affected by this Subpart.**

### **§ 60.92 Standard for particulate matter.**

**(a)** On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the

provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:

- (1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).
- (2) Exhibit 20 percent opacity, or greater.

[39 FR 9314, Mar. 8, 1974, as amended at 40 FR 46259, Oct. 6, 1975]

**C. Wright Construction, Inc. is subject to this Subpart. C. Wright Construction, Inc. has included its current emission estimate, HMA Design Parameters, and documented emissions inventory, which shows compliance.**

### **§ 60.93 Test methods and procedures.**

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in § 60.92 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).

(2) Method 9 and the procedures in § 60.11 shall be used to determine opacity.

**C. Wright Construction, Inc. is subject to this Subpart. C. Wright Construction, Inc. will conduct three qty sampling runs of EPA Methods 1, 2, 3, 5, 5 and 202 for Filterable Particulate Matter, Condensable Particulate Matter, and EPA Method 9**

**APPENDIX C – FACILITY DRAFT COMMENTS**

**The following comments were received from the facility on June 10, 2017:**

**Facility Comment:** Under Aggregate Handling, In Yellow, we have a value of 90% for % Control, Do you think that is too high?

**DEQ Response:** This is the value used in DEQ's spreadsheet for HMA general permit. It is assume that fugitive emissions will be controlled as specified in the permit. That permit condition is included in this permit as Permit Condition 2.2.

**Facility Comment:** Under the Emission Inventory, Page 1 of 2, you had some additional yellow highlighted items: POM (7-PAH Group), Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthracene, Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Polycyclic Organic Matter (total of max emissions rate). These are emission calculated by the Permit To Construct Spreadsheet. What are your thoughts? My initial thought, is that because the facility operates on natural gas fuel that these HAP emissions may be overstated for C Wright Construction Co., Inc.?

**DEQ Response:** They are taken from DEQ's spreadsheet for HMA general permit and are calculated using AP-42 emissions factors for HAM plant. Because the TAP increments are less than the respective ELs, even if TAP emissions are overstated, there is no consequence, and they don't affect permit conditions for this permitting action.