Statement of Basis

Permit to Construct No. P-2010.0046
Project ID 63137

Handy Truck Lines Meridian
Meridian, Idaho

Facility ID 001-00224

Final

November 22, 2023
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Permit Writer

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

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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AAC	acceptable ambient concentrations
AACC	acceptable ambient concentrations for carcinogens
acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BMP	best management practices
Btu	British thermal units
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS No.	Chemical Abstracts Service registry number
CBP	concrete batch plant
CEMS	continuous emission monitoring systems
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring systems
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent emissions
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
FEC	Facility Emissions Cap
GACT	Generally Available Control Technology
gph	gallons per hour
gpm	gallons per minute
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HHV	higher heating value
HMA	hot mix asphalt
hp	horsepower
hr/yr	hours per consecutive 12 calendar month period
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
iwg	inches of water gauge
km	kilometers
lb/hr	pounds per hour
lb/qtr	pound per quarter
m	meters
MACT	Maximum Achievable Control Technology
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NSPS	New Source Performance Standards

O&M	operation and maintenance
O_2	oxygen
PAH	polyaromatic hydrocarbons
PC	permit condition
PCB	polychlorinated biphenyl
PERF	Portable Equipment Relocation Form
PM	particulate matter
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
POM	polycyclic organic matter
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit
PTE	potential to emit
PW	process weight rate
RAP	recycled asphalt pavement
RFO	reprocessed fuel oil
RICE	reciprocating internal combustion engines
Rules	*Rules for the Control of Air Pollution in Idaho*
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_2	sulfur dioxide
SO_x	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
TEQ	toxicity equivalent
T-RACT	Toxic Air Pollutant Reasonably Available Control Technology
ULSD	ultra-low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compounds
yd^3	cubic yards
$\mu g/m^3$	micrograms per cubic meter

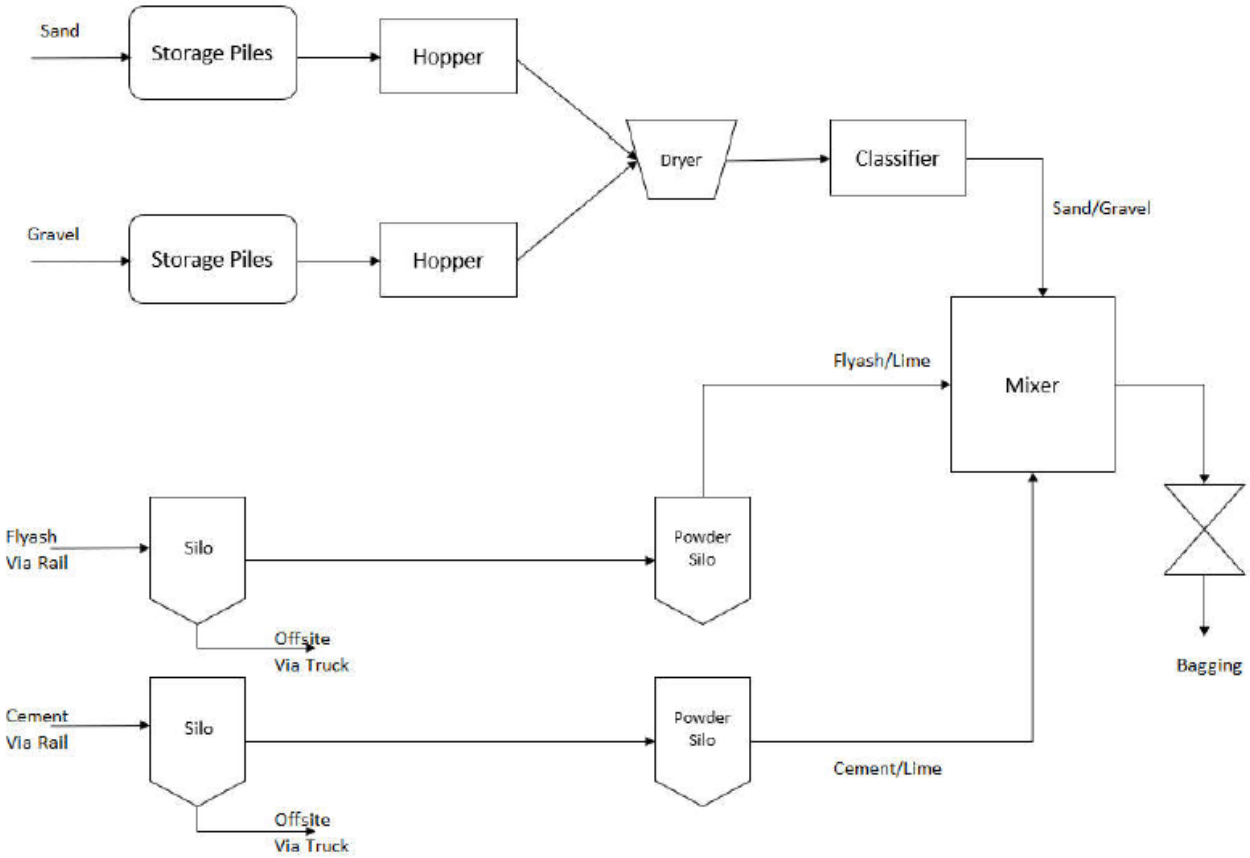
FACILITY INFORMATION

Description

The Handy Truck Line, Inc. (Handy) Meridian Terminal conducts two separate processes: flyash and cement transloading along with batch and custom cement and concrete dry mixing and bagging for commercial sales. Flyash and cement are delivered to the facility by rail and transferred into storage silos. A maximum of 335,000 tons per year of flyash and 600,000 tons per year of cement are transferred from the silos into trucks for shipment off-site. The remainder of the flyash and cement are used onsite to produce dry-mix concrete. Particulate matter emissions from the transloading and silo filling are controlled by baghouses.

Sand and gravel are delivered to the facility by truck and offloaded into storage piles. A maximum of 262,800 tons per year of sand and 131,400 tons per year of gravel are delivered to the facility. Sand and gravel are first transferred into hoppers, then conveyed to a natural gas-fired fluidized bed dryer where the excess moisture is driven off. The material is then sorted using a classifier. Sand and gravel meeting size specifications are loaded into a bucket elevator while the small amount of larger-size material rejected in the classifier is typically used onsite as parking area material. Particulate matter emissions from the storage piles are controlled by applying water, and emissions from the drying process are controlled by baghouses. The 45 ton per hour capacity of the dryer limits the amount of dry-mix concrete that can be produced.

Cement and flyash from the transloading facility (105,120 tons per year of cement and 10,500 tons per year of flyash) are pneumatically loaded from the storage silo into powder silos located within Building No. 2. Lime (approximately 15,800 tons per year) is delivered by truck and pneumatically loaded into powder silos. From the powder silos, sand, gravel, flyash, lime, and cement are metered out and transferred to the covered weigh belt feeder and then to the baffle mixer. The final mixture is then moved to the valve bagger for bagging. A baghouse controls dust emissions from the dry mix process carried out within Building No.2.



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).

May 28, 2010	P-2010.0046, PTC modification - increase allowable PM_{10} emissions limit for the fluidized bed dryer baghouse from 0.47 lb/hr to 2.07 lb/hr, Permit status (A, but will become S upon issuance of this permit)
August 14, 2009	P-2008.0138, Initial PTC for an existing batch and custom blend cement transloading facility. Required by CO E-070018, Permit status (S)

Application Scope

This PTC is a revision of an existing PTC.

The applicant has proposed to:

- Install and operate a new baghouse (BH9).
- Increase the operational hours for all baghouses.
- Increase the annual operational hours for the Fluidized Bed Dryer.
- Reduce the emission from baghouse #1 and #3 (increased efficiency)

Application Chronology

July 28, 2023	DEQ received an application.
August 9, 2023	DEQ received an application fee.
September 8, 2023	DEQ determined that the application was complete.
October 27 – November 13, 2023	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
October 27, 2023	DEQ made available the draft permit and statement of basis for peer and regional office review.
November 3, 2023	DEQ made available the draft permit and statement of basis for applicant review.
November 14, 2023	DEQ received the permit processing fee.
November 22, 2023	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

Sources	Control Equipment	Emission Point ID No.
Fluidized bed dryer Construction Date: June 1, 2007 Fuel: Natural Gas Rating: 10 MMBtu/hr Capacity: 45 T/hr Operation: 7,000 hr/yr	**Baghouse BH1** Manufacturer: Ventilex Model: 150-3500-192 Efficiency: PM/PM_{10}: 0.005 gr/dscf	**BH1/DRYER Stack:** Stack Height: 30 ft (9.1 m) Exit Diameter: 2.66ft (0.81 m) Exit Temperature: 400°F (477.6 K) Exit Flow Rate: 15,237 dscfm Exit Velocity: 32.8 ft/s (10 m/s)

Sources	Control Equipment	Emission Point ID No.
Dryer feed transfer points **Feeder Belt (sand and gravel)** Manufacturer: Custom built Construction Date: June 1, 2007 Rated capacity: 1 meter **Feed Conveyor (sand and gravel)** Manufacturer: Custom built Construction Date: June 1, 2007 Rated capacity: 1 meter	**Baghouse BH2** Manufacturer: Carbo Tech Model: 12-12-12-27-14-RTH Efficiency: PM/PM_{10}: 0.005 gr/dscf	**BH2 Stack:** Stack Height: 38 ft (11.6 m) Exit Diameter: 2.26 ft (0.69 m) Exit Temperature: 77°F (298 K) Exit Flow Rate: 15,302 dscfm Exit Velocity: 62.6 ft/s (19.1 m/s)
Building #2 Dry Mix Plant Dry Mix process dust emissions Inside Building #2.	**Baghouse BH3** Manufacturer: IAC Systems Model: 120TB-BHT-196 Style 3 Efficiency: PM/PM_{10}: 0.005 gr/dscf	**BH3 Stack:** Stack Height: 30 ft (9.1 m) Exit Diameter: 2.67 ft (0.81 m) Exit Temperature: 77°F (298 K) Exit Flow Rate: 18,362 dscfm Exit Velocity: 53.8 ft/s (16.4 m/s)
White Silo – Outside Sand Silo Silo vent	**Baghouse BH4** Manufacturer: Mikropul Model: B.V.-30 Efficiency: PM/PM_{10}: 0.02 gr/dscf (99.9%)	**BH4 Stack:** Stack Height: 66 ft (20.1 m) Exit Size: 0.4 ft x 1.0 ft Equiv. Dia: 0.71 ft (0.22 m) Exit Temperature: 77°F (298 K) Exit Flow Rate: 518 dscfm Exit Velocity: 53.1 ft/s (16.2 m/s)
(Rail) Track Load-out System - Storage Silos Flyash Bin Vents No. 1, 2, and 3	**Bin Vent Flyash Baghouses, BH5, BH6, BH7** Manufacturer: IAC Systems Model: 84TB-BVI-16 Style 2 Efficiency: PM/PM_{10}: 0.02 gr/dscf (90%)	**BH5, BH6, and BH7 Stacks:** Stack Height: 86 ft (26.2 m) Exit Size: 0.5 ft x 0.5 ft Equiv. Dia: 0.56 ft (0.17 m) Exit Temperature: 77°F (298 K) Exit Flow Rate: 1,224 dscfm Exit Velocity: 80.0 ft/s (24.4 m/s)
(Rail) Track Load-out System – Truck Load-out Fugitive flyash and truck loadout	**Fugitive Flyash Baghouse BH8** Manufacturer: Mikropul Model: 64S-10-20-C Efficiency: PM/PM_{10}: 0.02 gr/dscf	**BH8 Stack:** Stack Height: 24.9 ft (7.6 m) Exit Diameter: 0.95 ft (0.29 m) Exit Temperature: 77°F (298 K) Exit Flow Rate: 1,224 dscfm Exit Velocity: 108.6 ft/s (33.1 m/s)
(Rail) Track Load-out System – Truck Load-out Fugitive flyash and truck loadout	**Fugitive Flyash Baghouse BH9** Manufacturer: Ventilex Model: 847B-BVI-16 Efficiency: PM/PM_{10}: 0.005 gr/dscf	**BH9 Stack:** Stack Height: 24.9 ft (7.6 m) Exit Diameter: 0.95 ft (0.29 m) Exit Temperature: 77°F (298 K) Exit Flow Rate: 1,178 dscfm Exit Velocity: 108.6 ft/s (33 m/s)
Truck Unloading Front-Loader Transfers Feed Conveyor Transfers Sand and gravel delivery to piles. Transfer from piles to hoppers. Sand and gravel transfers from hoppers to feed belt and feed conveyor.	None	Fugitive Emissions

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 was developed for the operations at the facility (see Appendix A) associated with this proposed project.

Baghouse emission estimates used filter specifications in grains per dry standard cubic foot of air and the baghouse air flow rate to determine the emission rate of PM/PM_{10} in pounds per hour. $PM_{2.5}$ is assumed to be 25% of the total particulate emissions from the baghouses. Yearly emission estimates are calculated at 8,760 hours per year. HAP/TAP emissions from the baghouses use total particulate emission rates and the chemical composition percentage from the safety data sheet (SDS).

Fluidized bed dryer combustion emission estimates used AP-42 for SO_2, VOC, and $PM/PM_{10}/PM_{2.5}$ and used manufacturers specifications for NOx and CO. HAP/TAP PTE were based on emission factors from AP-42. The fluidized bed dryer is limited to 7,000 hours per year.

Uncontrolled Potential to Emit

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

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

The following table presents the uncontrolled Potential to Emit for regulated air pollutants as determined by DEQ staff. See Appendix A for a detailed presentation of the calculations and the assumptions used to determine emissions for each emissions unit. For this facility, uncontrolled Potential to Emit for the baghouses is determined by the controlled emissions divided by a 99% control efficiency. Uncontrolled Potential to Emit for the fluidized bed dryer assumes 8,760 hours per year of operation.

Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO	VOC
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources						
Fluidized Bed Dryer (BH1)	286.35	71.83	0.03	4.6	10.51	0.24
BH2	287.24	71.81	0.00	0.00	0.00	0.00
BH3	344.68	86.17	0.00	0.00	0.00	0.00
BH4	38.89	9.72	0.00	0.00	0.00	0.00
BH5	91.90	22.98	0.00	0.00	0.00	0.00
BH6	91.90	22.98	0.00	0.00	0.00	0.00
BH7	91.90	22.98	0.00	0.00	0.00	0.00
BH8	91.90	22.98	0.00	0.00	0.00	0.00
BH9	22.11	5.53	0.00	0.00	0.00	0.00
Total, Point Sources	**1346.87**	**336.98**	**0.03**	**4.60**	**10.51**	**0.24**

The following table presents the uncontrolled Potential to Emit for HAP pollutants as summarized by DEQ staff. See Appendix A for a detailed presentation of the calculations and the assumptions used to determine emissions for each emissions unit. For this operation uncontrolled Potential to Emit is based upon a worst-case for operation of the fluidized bed dryer at 8,760 hours per year and uncontrolled material handling using the chemical composition from SDS.

Table 3 UNCONTROLLED POTENTIAL TO EMIT FOR HAZARDOUS AIR POLLUTANTS

Hazardous Air Pollutants	PTE (T/yr)
2-Methylnaphthalene	1.03E-06
3-Methylchloranthrene	7.73E-08
7,12-Dimethylbenz(a)anthracene	6.87E-07
Acenaphthene	7.73E-08
Acenaphthylene	7.73E-08
Anthracene	1.03E-07
Arsenic	8.59E-06
Benzene	9.02E-05
Benzo(a)anthracene	7.73E-08
Benzo(a)pyrene	5.15E-08
Benzo(b)fluoranthene	7.73E-08
Benzo(g,h,i)perylene	5.15E-08
Benzo(k)fluoranthene	7.73E-08
Beryllium	5.15E-07
Cadmium	4.72E-05
Chromium	6.01E-05
Chrysene	7.73E-08
Cobalt	3.61E-06
Dibenzo(a,h)anthracene	5.15E-08
Dichlorobenzene	5.15E-05
Fluoranthene	1.29E-07
Fluorene	1.20E-07
Formaldehyde	3.22E-03
Hexane	7.73E-02
Indeno(1,2,3-cd)pyrene	7.73E-08
Manganese	1.63E-05
Mercury	1.12E-05
Naphthalene	2.62E-05
Nickel	9.02E-05
Phenanathrene	7.30E-07
Pyrene	2.15E-07
Selenium	1.03E-06
Toluene	1.46E-04
Manganese Dioxide	6.79E+00
Total	**6.87**

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 all criteria pollutants from all emissions units at the facility/for the one unit being modified 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 4 PRE-PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	PM_{10}		$PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]
Fluidized Bed Dryer (BH1)	2.44	4.80	0.67	1.31	0.006	0.012	1.05	2.11	2	4.02	0.05	0.11
BH2	0.64	1.29	0.16	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH3	3.09	6.20	0.77	1.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH4	0.09	0.18	0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH5	0.21	0.41	0.05	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH6	0.21	0.41	0.05	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH7	0.21	0.41	0.05	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH8	0.78	1.56	0.19	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pre-Project Totals	**7.67**	**15.26**	**1.96**	**3.91**	**0.006**	**0.012**	**1.05**	**2.11**	**2.00**	**4.02**	**0.05**	**0.11**

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 pollutants from all emissions units at the facility as determined 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_{10}		$PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]
Fluidized Bed Dryer (BH1)	0.73	3.12	0.24	0.98	0.006	0.021	1.05	3.68	2.4	8.40	0.05	0.19
BH2	0.66	2.87	0.16	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH3	0.79	3.45	0.20	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH4	0.09	0.39	0.02	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH5	0.21	0.92	0.05	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH6	0.21	0.92	0.05	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH7	0.21	0.92	0.05	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH8	0.21	0.92	0.05	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BH9	0.05	0.22	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Post-Project Totals	**3.16**	**13.73**	**0.83**	**3.64**	**0.006**	**0.021**	**1.05**	**3.68**	**2.4**	**8.40**	**0.05**	**0.19**

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_{10}		$PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Pre-Project Potential to Emit	7.67	15.26	1.96	3.91	0.006	0.012	1.05	2.11	2.00	4.02	0.05	0.11
Post Project Potential to Emit	3.16	13.73	0.83	3.64	0.006	0.021	1.05	3.68	2.4	8.40	0.05	0.19
Changes in Potential to Emit	**-4.51**	**-1.53**	**-1.13**	**-0.27**	**0**	**0.009**	**0**	**1.57**	**0.4**	**4.38**	**0**	**0.08**

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)
Barium	4.31E-05	4.31E-05	0.00E+00	0.033	No
Chromium	1.37E-05	1.37E-05	0.00E+00	0.033	No
Cobalt	8.24E-07	8.24E-07	0.00E+00	0.0033	No
Copper	8.33E-06	8.33E-06	0.00E+00	0.013	No
Dichlorobenzene	1.18E-05	1.18E-05	0.00E+00	20	No
Hexane	1.76E-02	1.76E-02	0.00E+00	12	No
Manganese	3.73E-06	3.73E-06	0.00E+00	0.067	No
Molybdenum	1.08E-05	1.08E-05	0.00E+00	0.667	No
Naphthalene	5.98E-06	5.98E-06	0.00E+00	3.33	No
Pentane	2.55E-02	2.55E-02	0.00E+00	118	No
Selenium	2.35E-07	2.35E-07	0.00E+00	0.013	No
Toluene	3.33E-05	3.33E-05	0.00E+00	25	No
Vanadium	2.25E-05	2.25E-05	0.00E+00	0.003	No
Zinc	2.84E-04	2.84E-04	0.00E+00	0.667	No
Crystalline Silica	1.91E-01	7.75E-02	-1.14E-01	0.0067	No
Calcium Oxide	3.82E-02	1.55E-02	-2.27E-02	0.133	No
Manganese Dioxide	3.82E-02	1.55E-02	-2.27E-02	0.333	No
Phosphorus Pentoxide	3.82E-02	1.55E-02	-2.27E-02	0.067	No
Portland Cement	3.25E+00	1.32E+00	-1.93E+00	0.667	No
Gypsum	2.74E-01	1.11E-01	-1.63E-01	0.667	No
Magnesium Oxide	2.39E-01	9.71E-02	-1.42E-01	0.667	No
Limestone	1.71E-01	6.94E-02	-1.02E-01	0.667	No
Calcium Oxide	1.71E-01	6.94E-02	-1.02E-01	0.133	No
Quartz	1.03E-02	4.16E-03	-6.10E-03	0.0067	No

All changes in emissions rates for non-carcinogenic TAP were below EL (screening emissions level) 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

A summary of the estimated PTE for emissions increase of carcinogenic toxic air pollutants (TAP) is provided 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)
7-PAH Group	5.13E-08	8.93E-08	3.80E-08	2.00E-06	No
Arsenic	9.00E-07	1.57E-06	6.67E-07	1.50E-06	No
Benzene	9.45E-06	1.65E-05	7.00E-06	8.00E-04	No
Beryllium	5.40E-08	9.40E-08	4.00E-08	2.80E-05	No
Cadmium	4.95E-06	8.62E-06	3.67E-06	3.70E-06	No
Formaldehyde	3.37E-04	5.88E-04	2.50E-04	5.10E-04	No
Nickel	9.45E-06	1.65E-05	7.00E-06	2.70E-05	No

All changes in emissions rates for carcinogenic TAP were below EL (screening emissions level) 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 (lb/hr)	PTE (T/yr)
2-Methylnaphthalene	2.35E-07	8.24E-07
3-Methylchloranthrene	1.76E-08	6.18E-08
7,12-Dimethylbenz(a)anthracene	1.57E-07	5.49E-07
Acenaphthene	1.76E-08	6.18E-08
Acenaphthylene	1.76E-08	6.18E-08
Anthracene	2.35E-08	8.24E-08
Arsenic	1.96E-06	6.86E-06
Benzene	2.06E-05	7.21E-05
Benzo(a)anthracene	1.76E-08	6.18E-08
Benzo(a)pyrene	1.18E-08	4.12E-08
Benzo(b)fluoranthene	1.76E-08	6.18E-08
Benzo(g,h,i)perylene	1.18E-08	4.12E-08
Benzo(k)fluoranthene	1.76E-08	6.18E-08
Beryllium	1.18E-07	4.12E-07
Cadmium	1.08E-05	3.77E-05
Chromium	1.37E-05	4.80E-05
Chrysene	1.76E-08	6.18E-08
Cobalt	8.24E-07	2.88E-06
Dibenzo(a,h)anthracene	1.18E-08	4.12E-08
Dichlorobenzene	1.18E-05	4.12E-05
Fluoranthene	2.94E-08	1.03E-07
Fluorene	2.75E-08	9.61E-08
Formaldehyde	7.35E-04	2.57E-03
Hexane	1.76E-02	6.18E-02
Indeno(1,2,3-cd)pyrene	1.76E-08	6.18E-08
Manganese	3.73E-06	1.30E-05
Mercury	2.55E-06	8.92E-06
Naphthalene	5.98E-06	2.09E-05
Nickel	2.06E-05	7.21E-05
Phenanathrene	1.67E-07	5.83E-07
Pyrene	4.90E-08	1.72E-07
Selenium	2.35E-07	8.24E-07
Toluene	3.33E-05	1.17E-04
Manganese Dioxide	1.55E-02	6.79E-02
Totals	**0.03**	**0.13**

Ambient Air Quality Impact Analyses

The facility wide estimated emission rates of SO_2, NO_X, CO, and VOC from the facility were below applicable screening emission levels (EL) and published DEQ modeling thresholds established in IDAPA 58.01.01.585-586 and in the State of Idaho Air Quality Modeling Guideline[1]. The facility wide estimated emission rates of PM_{10} and $PM_{2.5}$ exceeded the ¼ SER, but the project has a net reduction for both PM_{10} and $PM_{2.5}$. The change in TAP emissions for the project were below the applicable screening emission levels. Refer to the Emissions Inventories section for additional information concerning the emission inventories.

The applicant has demonstrated pre-construction compliance to DEQ's satisfaction that emissions from this facility will not cause or significantly contribute to a violation of any ambient air quality standard.

[1] Modeling Applicability Thresholds in Table 2, Guideline for Performing Air Quality Impact Analyses, July 2021.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Ada County, which is designated as attainment or unclassifiable for $PM_{2.5}$, PM_{10}, SO_2, NO_2, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Facility Classification

The AIRS/AFS facility classification codes are as follows:

For HAPs (Hazardous Air Pollutants) Only:

A = Use when any one HAP has permitted emissions > 10 T/yr or if the aggregate of all HAPS (Total HAPs) has permitted emissions > 25 T/yr.

SM80 = Use if a synthetic minor (uncontrolled HAPs emissions are > 10 T/yr or if the aggregate of all uncontrolled HAPs (Total HAPs) emissions are > 25 T/yr and permitted emissions fall below applicable major source thresholds) and the permit sets limits > 8 T/yr of a single HAP or ≥ 20 T/yr of Total HAPs.

SM = Use if a synthetic minor (uncontrolled HAPs emissions are > 10 T/yr or if the aggregate of all uncontrolled HAPs (Total HAPs) emissions are > 25 T/yr and permitted emissions fall below applicable major source thresholds) and the permit sets limits < 8 T/yr of a single HAP and/or < 20 T/yr of Total HAPs.

B = Use when the potential to emit (i.e. uncontrolled emissions and permitted emissions) are below the 10 and 25 T/yr HAP major source thresholds.

UNK = Class is unknown.

For All Other Pollutants:

A = Use when permitted emissions of a pollutant are > 100 T/yr.

SM80 = Use if a synthetic minor for the applicable pollutant (uncontrolled emissions are > 100 T/yr and permitted emissions fall below 100 T/yr) and permitted emissions of the pollutant are ≥ 80 T/yr.

SM = Use if a synthetic minor for the applicable pollutant (uncontrolled emissions are > 100 T/yr and permitted emissions fall below 100 T/yr) and permitted emissions of the pollutant are < 80 T/yr.

B = Use when the potential to emit (i.e. uncontrolled emissions and permitted emissions) are below the 100 T/yr major source threshold.

UNK = Class is unknown.

Table 2 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION

Pollutant	Uncontrolled PTE (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM_{10}	1346.87	13.73	**100**	SM
$PM_{2.5}$	336.98	3.64	**100**	SM
SO_2	0.03	0.02	**100**	B
NO_X	4.60	3.68	**100**	B
CO	10.51	8.40	**100**	B
VOC	0.24	0.19	**100**	B
HAP (single)	6.79	0.068	**10**	B
Total HAPs	6.87	0.13	**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 proposed new emissions source and revised emissions sources. 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 emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Conditions 2.4, 2.8, and 2.12.

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_{10}, SO_2, NO_X, CO, and VOC 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)

Because the facility processes nonmetallic minerals and uses a dryer the following is an NSPS applicability analysis for the facility:

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

60.670 - Applicability and designation of affected facility

60.670(a)(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; and stand-alone screening operations at plants without crushers or grinding mills.

The Handy Meridian Terminal - Operations include stand-alone screening operations for sand and gravel (i.e., the classifier), but do not include a crusher or grinding mill. Therefore, this NSPS does not apply.

40 CFR 60 Subpart UUU Standards of Performance for Calciners and Dryers in Mineral Industries

60.730 Applicability and designation of affected facility

(a) The affected facility to which the provisions of this subpart apply is each calciner and dryer at a mineral processing plant. Feed and product conveyors are not considered part of the affected facility. For the brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered.

(b) An affected facility that is subject to the provisions of subpart LL, Metallic Mineral Processing Plants, is not subject to the provisions of this subpart. Also, the following processes and process units used at mineral processing plants are not subject to the provisions of this subpart: vertical shaft kilns in the magnesium compounds industry; the chlorination-oxidation process in the titanium dioxide industry; coating kilns, mixers, and aerators in the roofing granules industry; and tunnel kilns, tunnel dryers, apron dryers, and grinding equipment that also dries the process material used in any of the 17 mineral industries (as defined in §60.731, "Mineral processing plant").

(c) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after April 23, 1986, is subject to the requirements of this subpart.

60.731 Definitions

Dryer means the equipment used to remove uncombined (free) water from mineral material through direct or indirect heating.

Mineral processing plant means any facility that processes or produces any of the following minerals, their concentrates or any mixture of which the majority (>50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, **industrial sand**, kaolin, **lightweight aggregate**, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

Handy does not process industrial sand (recycled sand), lightweight aggregate (for the production of lightweight concrete products), or any of the other minerals listed in the 60.731 definition of *mineral processing plant*. According to AP-42 section 11.20, Lightweight aggregate is a type of coarse aggregate that is used in the production of lightweight concrete products such as concrete block, structural concrete, and pavement. The Standard Industrial Classification (SIC) code for lightweight aggregate manufacturing is 3295; there currently is no Source Classification Code (SCC) for the industry. Most lightweight aggregate is produced from materials such as clay, shale, or slate. Blast furnace slag, natural pumice, vermiculite, and perlite can be used as substitutes, however. To produce lightweight aggregate, the raw material (excluding pumice) is expanded to about twice the original volume of the raw material. The expanded material has properties similar to natural aggregate but is less dense and therefore yields a lighter concrete product.

The production of lightweight aggregate begins with mining or quarrying the raw material. The material is crushed with cone crushers, jaw crushers, hammer mills, or pug mills and is screened for size. Oversized material

is returned to the crushers, and the material that passes through the screens is transferred to hoppers. From the hoppers, the material is fed to a rotary kiln, which is fired with coal, coke, natural gas, or fuel oil, to temperatures of about 1200°C (2200°F). As the material is heated, it liquefies and carbonaceous compounds in the material form gas bubbles, which expand the material; in the process, volatile organic compounds (VOC) are released. From the kiln, the expanded product

(Clinker) is transferred by conveyor into the clinker cooler where it is cooled by air, forming a porous material. After cooling, the lightweight aggregate is screened for size, crushed if necessary, stockpiled, and shipped. Figure 11.20-1 illustrates the lightweight aggregate manufacturing process.

Although the majority (approximately 90 percent) of plants uses rotary kilns, traveling grates are also used to heat the raw material. In addition, a few plants process naturally occurring lightweight aggregate such as pumice. The terminal is therefore not a mineral processing plant and is therefore not subject to the requirements of this NSPS.

NESHAP Applicability (40 CFR 61)

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

MACT/GACT Applicability (40 CFR 63)

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

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.

1 – Permit Scope

Permit Conditions 1.1 through 1.3 and Table 1.1

These permit conditions describe the purpose of the project and list the regulated sources.

2 – Cement Transloading and Dry Mix

Permit Conditions 2.1, 2.2, and Table 2.1

These permit conditions give the process description and emission sources contained in this section of the permit.

Permit Condition 2.3 – Emission Limits

This permit condition lists the emission limits for the baghouses controlling emissions from the cement transloading and dry mix operations at the facility. In the previous permit, this table only limited PM_{10} and included a combined limit for Baghouses 2 through 8. This permit revision changed the annual hours of operation for all of the baghouses along with filter efficiencies on some. Listing all the emission limits for each baghouse gives a better summary of emissions from each source. Emission limits were calculated for material handling using the baghouse flow rate (dscfm) and the manufacturer specifications on the filters (gr/dscf) for the hourly rates and multiplying 8,760 hours per year for the annual rates. Combustion emission limits for the fluidized bed dryer (BH1) used AP-42 emission factors for $PM_{10}/PM_{2.5}$, SO_2, and VOC. NOx and CO combustion emission factors were from manufacturer specifications for the burner and are both greater than the corresponding AP-42 emission factors.

The new PM_{10} emission limit on the fluidized bed dryer is 0.73 lb/hr. The measured PM_{10} emissions from the February 23, 2022, test were 0.25 lb/hr (34% of the new limit) using EPA Methods 5 and 202.

Permit Condition 2.4 – Opacity Limit

This permit condition limits opacity from the stacks, vents, and equivalent openings associated with the cement transloading and dry mix operations at the facility. This permit condition was updated to include all stacks at the facility.

Permit Condition 2.5 – Seasonal Operation Limits

This permit condition increases the Spring/Summer/Fall operations from 12 hours per day to 24 hours per day and the Winter operations from 9 hours per day to 12 hours per day.

Permit Condition 2.6 – Sand and Aggregate Delivery Limits

This permit condition was Permit Condition 10 in the previous permit. The format was changed to align with the rest of the permit conditions.

Permit Condition 2.7 – Baghouse Control Equipment

This permit condition was included in the previous permit but changed to include the new Baghouse #9.

Permit Condition 2.8 – Baghouse/Filter System Procedure

This permit condition was revised with the current standard language for permits with baghouse controls. This is the same as Permit Condition 12 in the previous permit.

Permit Condition 2.9 – Seasonal Operation Records

This permit condition was not changed from Permit Condition 13 in the previous permit.

Permit Condition 2.10 – Sand and Aggregate Delivery Monitoring

This permit condition was not changed from Permit Condition 14 in the previous permit.

Permit Condition 2.11 – Fugitive Emissions Monitoring

This permit condition was not changed from Permit Condition 15 in the previous permit.

Permit Condition 2.12 – Visible Emissions Monitoring

This permit condition was not changed from Permit Condition 16 in the previous permit.

Permit Condition 2.13 – Recordkeeping

This permit condition was not changed from Permit Condition 17 in the previous permit.

Permit Condition 2.14 – PM_{10} Performance Test

This permit condition was updated from Permit Condition 18 in the previous permit. The requirement to perform the test by 2009 was updated because that test has been completed. The most recent test date was included, and the five-year testing cycle language was updated to the current version. The referenced permit conditions were updated with the new numbering system.

Permit Condition 2.15 – PM_{10} Performance Test Methods and Procedures

This permit condition was not changed from Permit Condition 19 in the previous permit.

Permit Condition 2.16 – Performance Test Reporting

This permit condition was not changed from Permit Condition 20 in the previous permit.

3 – General Provisions

Permit Conditions 3.1 through 3.20

These permit conditions were updated to the current version and included in all PTC permits as standard language.

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 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

Existing Combustion					
Pollutant	Dryer EF	Units	lb/hr	ton/yr	
PM10	7.6	lb/MMscf	0.07	0.15	AP-42
SO2	0.6	lb/MMscf	0.006	0.012	AP-42
NOx	0.105	lb/MMBtu	1.05	2.11	Manuf
CO	0.2	lb/MMBtu	2	4.02	Manuf
VOC	5.5	lb/MMscf	0.05	0.11	AP-42
Lead	0.0005	lb/MMscf	4.90E-06	9.85E-06	AP-42
NOx	107.1	lb/MMscf	AP-42 100 lb/MMscf		
CO	204	lb/MMscf	AP-42 84 lb/MMscf		

Proposed Combustion						Uncontrolled	Delta	
Pollutant	Dryer EF	Units	lb/hr	ton/yr		ton/yr	lb/hr	ton/yr
PM10	7.6	lb/MMscf	0.07	0.26	AP-42	0.33	0.00	0.11
SO2	0.6	lb/MMBtu	0.006	0.021	AP-42	0.03	0.00	0.009
NOx	0.105	lb/MMBtu	1.05	3.68	Manuf	4.60	0.00	1.56
CO	0.24	lb/MMBtu	2.4	8.40	Manuf	10.51	0.40	4.38
VOC	5.5	lb/MMscf	0.05	0.19	AP-42	0.24	0.00	0.08
Lead	0.0005	lb/MMscf	4.90E-06	0.00	AP-42	0.00	0.00	0.00
NOx	107.1	lb/MMscf	AP-42 100 lb/MMscf					
CO	244.8	lb/MMscf	AP-42 84 lb/MMscf					

Existing Baghouse				
ID	CFM	gr/dscf	PM10	
			lb/hr	ton/yr
BH1	11000	0.04	2.37	4.65
BH2	15000	0.005	0.64	1.29
BH3	18000	0.02	3.09	6.20
BH4	508	0.02	0.09	0.18
BH5	1200	0.02	0.21	0.41
BH6	1200	0.02	0.21	0.41
BH7	1200	0.02	0.21	0.41
BH8	4523	0.02	0.78	1.56
BH9				

Proposed Baghouse							Uncontrolled		Delta	
ID	dscfm	gr/dscf	PM10		PM2.5		PM10	PM2.5		
			lb/hr	ton/yr	lb/hr	ton/yr	ton/yr	ton/yr	lb/hr	ton/yr
BH1	15237	0.005	0.65	2.86	0.24	0.98	286.02	71.51	-1.72	-1.79
BH2	15302	0.005	0.66	2.87	0.16	0.72	287.24	71.81	0.01	1.58
BH3	18362	0.005	0.79	3.45	0.20	0.86	344.68	86.17	-2.30	-2.76
BH4	518	0.02	0.09	0.39	0.02	0.10	38.89	9.72	0.00	0.21
BH5	1224	0.02	0.21	0.92	0.05	0.23	91.90	22.98	0.00	0.51
BH6	1224	0.02	0.21	0.92	0.05	0.23	91.90	22.98	0.00	0.51
BH7	1224	0.02	0.21	0.92	0.05	0.23	91.90	22.98	0.00	0.51
BH8	1224	0.02	0.21	0.92	0.05	0.23	91.90	22.98	-0.57	-0.64
BH9	1178	0.005	0.05	0.22	0.01	0.06	22.11	5.53	0.05	0.22

Pollutant and Averaging Period	SIL Threshold	BRC	1/8 SER	1/4 SER	SER	Faciltiy Wide	FW BRC	FW 1/4 SER	
CO 1-hr	84	2.3	2.9	5.7	100 ton/yr	2.4	yes	no	
CO 8-hr	26	2.3	2.9	5.7	100 ton/yr	2.4	yes	no	
NO2 1-hr	0.38	0.91	1.14	2.3	40 ton/yr	1.05	yes	no	
NO2 ann	0.43 (1.9 ton/yr)	4.0 ton/yr	5.0 ton/yr	10.0 ton/yr	40 ton/yr	3.68	no	no	
SO2 1-hr	0.4	0.91	1.14	2.3	40 ton/yr	0.006	no	no	
PM10 24-hr	0.32	0.34	0.43	0.86	15 ton/yr	3.13	yes	yes	Net Reduction in PM10
PM2.5 24-hr	0.092	0.23	0.29	0.57	10 ton/yr	0.89	yes	yes	Net Reduction in PM2.5
PM2.5 ann	0.085 (0.37ton/yr)	1.00 ton/yr	1.25 ton/yr	2.5 ton/yr	10 ton/yr	3.89	yes	yes	Net Reduction in PM2.5
Pb 3-month	0.00102 (0.73 lb/mon)	9.9 lb/mon	12.3 lb/mon	24.7 lb/mon	0.6 ton/yr	0.002859	no	no	

Fluidized Bed Dryer Burner	10	MMBtu/hr
Conversion Factor	1020	MMBtu/MMscf
Annual Operation Limit	7000	hours/year
fly ash total tons per year	335,000	25.20%
Cement total tons per year	600,000	45.14%
Aggregates total tons per year	394,200	29.66%

	HAPs	Emission Factor	Uncontrolled		Controlled	
		(lb/MMscf)	lb/hr	ton/yr	lb/hr	ton/yr
HAP	2-Methylnaphthalene	2.40E-05	2.35E-07	1.03E-06	2.35E-07	8.24E-07
HAP	3-Methylchloranthrene	1.80E-06	1.76E-08	7.73E-08	1.76E-08	6.18E-08
HAP	7,12-Dimethylbenz(a)anthracene	1.60E-05	1.57E-07	6.87E-07	1.57E-07	5.49E-07
HAP	Acenaphthene	1.80E-06	1.76E-08	7.73E-08	1.76E-08	6.18E-08
HAP	Acenaphthylene	1.80E-06	1.76E-08	7.73E-08	1.76E-08	6.18E-08
HAP	Anthracene	2.40E-06	2.35E-08	1.03E-07	2.35E-08	8.24E-08
HAP	Arsenic	2.00E-04	1.96E-06	8.59E-06	1.96E-06	6.86E-06
HAP	Benzene	2.10E-03	2.06E-05	9.02E-05	2.06E-05	7.21E-05
HAP	Benzo(a)anthracene	1.80E-06	1.76E-08	7.73E-08	1.76E-08	6.18E-08
HAP	Benzo(a)pyrene	1.20E-06	1.18E-08	5.15E-08	1.18E-08	4.12E-08
HAP	Benzo(b)fluoranthene	1.80E-06	1.76E-08	7.73E-08	1.76E-08	6.18E-08
HAP	Benzo(g,h,i)perylene	1.20E-06	1.18E-08	5.15E-08	1.18E-08	4.12E-08
HAP	Benzo(k)fluoranthene	1.80E-06	1.76E-08	7.73E-08	1.76E-08	6.18E-08
HAP	Beryllium	1.20E-05	1.18E-07	5.15E-07	1.18E-07	4.12E-07
HAP	Cadmium	1.10E-03	1.08E-05	4.72E-05	1.08E-05	3.77E-05
HAP	Chromium	1.40E-03	1.37E-05	6.01E-05	1.37E-05	4.80E-05
HAP	Chrysene	1.80E-06	1.76E-08	7.73E-08	1.76E-08	6.18E-08
HAP	Cobalt	8.40E-05	8.24E-07	3.61E-06	8.24E-07	2.88E-06
HAP	Dibenzo(a,h)anthracene	1.20E-06	1.18E-08	5.15E-08	1.18E-08	4.12E-08
HAP	Dichlorobenzene	1.20E-03	1.18E-05	5.15E-05	1.18E-05	4.12E-05
HAP	Fluoranthene	3.00E-06	2.94E-08	1.29E-07	2.94E-08	1.03E-07
HAP	Fluorene	2.80E-06	2.75E-08	1.20E-07	2.75E-08	9.61E-08
HAP	Formaldehyde	7.50E-02	7.35E-04	3.22E-03	7.35E-04	2.57E-03
HAP	Hexane	1.80E+00	1.76E-02	7.73E-02	1.76E-02	6.18E-02
HAP	Indeno(1,2,3-cd)pyrene	1.80E-06	1.76E-08	7.73E-08	1.76E-08	6.18E-08
HAP	Manganese	3.80E-04	3.73E-06	1.63E-05	3.73E-06	1.30E-05
HAP	Mercury	2.60E-04	2.55E-06	1.12E-05	2.55E-06	8.92E-06
HAP	Naphthalene	6.10E-04	5.98E-06	2.62E-05	5.98E-06	2.09E-05
HAP	Nickel	2.10E-03	2.06E-05	9.02E-05	2.06E-05	7.21E-05
HAP	Phenanathrene	1.70E-05	1.67E-07	7.30E-07	1.67E-07	5.83E-07
HAP	Pyrene	5.00E-06	4.90E-08	2.15E-07	4.90E-08	1.72E-07
HAP	Selenium	2.40E-05	2.35E-07	1.03E-06	2.35E-07	8.24E-07
HAP	Toluene	3.40E-03	3.33E-05	1.46E-04	3.33E-05	1.17E-04
HAP	Manganese Dioxide	2%	1.55E+00	6.79E+00	1.55E-02	6.79E-02
					0.03	**0.13**

			Daily Average			Screening	
	TAPs - 585 - Daily Average	Emission Factor	Pre-Proj	Post-Proj	Delta	EL	
		(lb/MMscf)	lb/hr	lb/hr	lb/hr	lb/hr	
585	Barium	4.40E-03	4.31E-05	4.31E-05	0.00E+00	0.033	No
585	Chromium	1.40E-03	1.37E-05	1.37E-05	0.00E+00	0.033	No
585	Cobalt	8.40E-05	8.24E-07	8.24E-07	0.00E+00	0.0033	No
585	Copper	8.50E-04	8.33E-06	8.33E-06	0.00E+00	0.013	No
585	Dichlorobenzene	1.20E-03	1.18E-05	1.18E-05	0.00E+00	20	No
585	Hexane	1.80E+00	1.76E-02	1.76E-02	0.00E+00	12	No
585	Manganese	3.80E-04	3.73E-06	3.73E-06	0.00E+00	0.067	No
585	Molybdenum	1.10E-03	1.08E-05	1.08E-05	0.00E+00	0.667	No
585	Naphthalene	6.10E-04	5.98E-06	5.98E-06	0.00E+00	3.33	No
585	Pentane	2.60E+00	2.55E-02	2.55E-02	0.00E+00	118	No
585	Selenium	2.40E-05	2.35E-07	2.35E-07	0.00E+00	0.013	No
585	Toluene	3.40E-03	3.33E-05	3.33E-05	0.00E+00	25	No
585	Vanadium	2.30E-03	2.25E-05	2.25E-05	0.00E+00	0.003	No
585	Zinc	2.90E-02	2.84E-04	2.84E-04	0.00E+00	0.667	No
585	Crystalline Silica	10%	1.91E-01	7.75E-02	-1.14E-01	0.0067	No
585	Calcium Oxide	2%	3.82E-02	1.55E-02	-2.27E-02	0.133	No
585	Manganese Dioxide	2%	3.82E-02	1.55E-02	-2.27E-02	0.333	No
585	Phosphorus Pentoxide	2%	3.82E-02	1.55E-02	-2.27E-02	0.067	No
585	Portland Cement	95%	3.25E+00	1.32E+00	-1.93E+00	0.667	No
585	Gypsum	8%	2.74E-01	1.11E-01	-1.63E-01	0.667	No
585	Magnesium Oxide	7%	2.39E-01	9.71E-02	-1.42E-01	0.667	No
585	Limestone	5%	1.71E-01	6.94E-02	-1.02E-01	0.667	No
585	Calcium Oxide	5%	1.71E-01	6.94E-02	-1.02E-01	0.133	No
585	Quartz	0.3%	1.03E-02	4.16E-03	-6.10E-03	0.0067	No

			Annual Average			Screening	
	TAPs - 586 - Annual Average	Emission Factor	Pre-Proj	Post-Proj	Delta	EL	
		(lb/MMscf)	lb/hr	lb/hr	lb/hr	lb/hr	
586	7-PAH Group	1.14E-05	5.13E-08	8.93E-08	3.80E-08	2.00E-06	No
586	Arsenic	2.00E-04	9.00E-07	1.57E-06	6.67E-07	1.50E-06	No
586	Benzene	2.10E-03	9.45E-06	1.65E-05	7.00E-06	8.00E-04	No
586	Beryllium	1.20E-05	5.40E-08	9.40E-08	4.00E-08	2.80E-05	No
586	Cadmium	1.10E-03	4.95E-06	8.62E-06	3.67E-06	3.70E-06	No
586	Formaldehyde	7.50E-02	3.37E-04	5.88E-04	2.50E-04	5.10E-04	No
586	Nickel	2.10E-03	9.45E-06	1.65E-05	7.00E-06	2.70E-05	No

APPENDIX B – FACILITY DRAFT COMMENTS

The following comments were received from the facility on November 8, 2023:

Facility Comment: Everything looks good!

DEQ Response: DEQ will finalize the permit once the processing fee is received.

APPENDIX C – PROCESSING FEE

PTC Processing Fee Calculation Worksheet

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:	**HANDY TRUCK LINES MERIDIAN**
Address:	**630 E King Street**
City:	**Meridian**
State:	**Idaho**
Zip Code:	**83642**
Facility Contact:	**Branson Handy**
Title:	**Quality Control Manager**
AIRS No.:	**327999**

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)

Emissions Inventory			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO_X	1.6	0	1.6
SO_2	0.0	0	0.0
CO	4.4	0	4.4
PM10	-1.5	0	-1.5
VOC	0.1	0	0.1
Total:	0.0	0	**4.5**
Fee Due	**$ 2,500.00**		

Comments: