

Statement of Basis

**Permit to Construct No. P-2019.0003
Project ID 62160**

**Staker Parson dba Idaho Concrete 00151
Portable, currently located in
Eagle, Idaho**

Facility ID 777-00151

Final

February 27, 2019
for, **Will Tiedemann** *D.P.*
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
BMP	best management practices
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
DEQ	Department of Environmental Quality
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
HAP	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pounds per hour
MACT	Maximum Achievable Control Technology
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
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
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
scf	standard cubic feet
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/yr	tons per consecutive 12 calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
U.S.C.	United States Code
µg/m ³	micrograms per cubic meter
VOC	volatile organic compounds
yd ³	cubic yards

FACILITY INFORMATION

Description

Staker & Parson Companies dba Idaho Concrete 00151 is a portable central concrete batch plant. The facility produces concrete by mixing cement, sand, and aggregate according to the specifications of their customers.

Line power is used exclusively at the facility. Therefore, no IC engines powering electrical generators were included in the application.

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).

April 3, 2014	T2-2013.0049 project 61256 was renewed with no changes. Permit status (A), but will become (S) upon issuance.
August 5, 2008	Tier II Operating Permit and Permit to Construct (T2/PTC) T2-2008.0071, is a renewal of the 2003 Tier II Operating Permit (S).
July 8, 2003	Tier II Operating Permit No. T2-020033, limits PM ₁₀ emissions in accordance with Northern Ada County Maintenance Plan (S).
August 7, 2002	PTC 777-00151, PTC amendment to reflect facility name change, Permit status (S).
August 3, 2000	PTC 777-00151, PTC modification to allow operating in attainment and nonattainment areas, Permit status (S).
May 15, 1996	PTC 777-00151, Initial PTC issued, Permit status (S).

Application Scope

The applicant has agreed to conversion of their Tier II operating permit (T2) to a Permit to Construct (PTC) and has paid a PTC application fee.

This facility is identified in 40 CFR 52.670(d), Subpart N in the Northern Ada County PM₁₀ Maintenance Plan, and all applicable requirements from the Maintenance Plan of the State Implementation Plan (SIP) have been incorporated in this permit and remain in updated form by this permitting action (i.e., permit conditions: 2.1 through 2.8 and permit conditions 3.1 through 3.9.) A copy of the relevant SIP is included in Appendix A.

Application Chronology

December 27, 2018	DEQ received an application.
January 7, 2019	DEQ determined that the application was complete.
January 8, 2019	DEQ received an application fee.
January 22, 2019	DEQ made available the draft permit and statement of basis for peer and regional office review.
February 2, 2019	DEQ made available the draft permit and statement of basis for applicant review.
February 22, 2019	DEQ received the permit processing fee.
February 27, 2019	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Source ID No.	Sources ^(a)	Control Equipment	Emission Point ID No.
Materials Handling	<u>Material Transfer Points:</u> Materials handling Concrete aggregate transfers Truck unloading of aggregate Aggregate conveyor transfers Aggregate handling	Fugitive BMP	N/A
Concrete Mixer	<u>Concrete Batch Plant</u> Manufacturer: Erie Strayer Model: 12 Yard Manufacture Date: 1995 Max. production: 260 yd ³ /hr, 1440 yd ³ /day, and 500,000 yd ³ /yr <u>Cement Storage Silo^(b):</u> Storage capacity: 145 cubic yards (yd ³) Bin Vent Filter/Baghouse Manufacturer ^(a) : R&S Model: PJC-305 <u>Second Cement Storage Silo^(b):</u> Storage capacity: 170 cubic yards (yd ³) Bin Vent Filter/Baghouse Manufacturer ^(a) : C&W Model: CP-LRP-6 <u>Fly Ash Storage Silo^(b):</u> Storage capacity: 100 cubic yards (yd ³) Bin Vent Filter/Baghouse Manufacturer ^(a) : C&W Model: CP-LRP-6	<u>Weigh Batch Baghouse:</u> Manufacturer: Coneco Model: CP 35 PM ₁₀ control efficiency: 99% <u>Cement Storage Silo Bin Vent Filter/Baghouse:</u> Manufacturer: R&S Model: PJC-305 PM ₁₀ control efficiency: 99% <u>Second Cement Storage Silo Bin Vent Filter/Baghouse:</u> Manufacturer: C&W Model: CP-LRP-6 PM ₁₀ control efficiency: 99% <u>Fly Ash Storage Silo Bin Vent Filter/Baghouse:</u> Manufacturer: C&W Model: CP-LRP-6 PM ₁₀ /PM _{2.5} control efficiency: 99% <u>Material Transfer Points:</u> PM ₁₀ control efficiency: 75%	<u>Weigh Batch Baghouse Exhaust:</u> Exit height: 40 ft (13.7 m) Exit diameter: 4.0 ft (0.76 m) Exit flow rate: 140 acfm Exit temperature: ambient <u>Cement Storage Silo Bin Vent Filter/Baghouse Exhaust:</u> Exit height: 90 ft (10.7 m) Exit diameter: 3.6 ft (0.76 m) Exit flow rate: 1,700 acfm Exit temperature: ambient <u>Second Cement Storage Silo Bin Vent Filter/Baghouse Exhaust:</u> Exit height: 80 ft (21.3 m) Exit diameter: 4.0 ft (1.1 m) Exit flow rate: 1760 acfm Exit temperature: ambient <u>Fly Ash Storage Silo Bin Vent Filter/Baghouse Exhaust:</u> Exit height: 65 ft (19.8 m) Exit diameter: 4.0 ft (1.2 m) Exit flow rate: 1,760 acfm Exit temperature: ambient
Boiler	<u>Boiler:</u> Manufacturer: Ludell Model: DC10000 Manufacture Date: 1998 Heat input rating: 10.0 MMBtu/hr Fuel: Natural gas	N/A	<u>Boiler Exhaust:</u> Exit height: 25 ft (7.6 m) Exit diameter: 1.5 ft (0.46 m) Exit temperature: 200 °F (93 °C)

- a) This table lists emission units present at the facility as listed by the applicant in their permit application.
- b) The cement and fly ash storage silo baghouses are process equipment as they are part of the physical and operational design of the silos. PM₁₀ controlled emission factors were used when determining Potential to Emit.

Emission Inventories

This permitting action is to convert the existing Tier II operation permit to a PTC. An increase in emissions or a physical change in the method of operation of permitted emission sources has not been proposed, therefore, no new emissions inventory is required.

Ambient Air Quality Impact Analyses

Because An increase in emissions was not proposed for this project, modeling is not required.

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}, PM₁₀, SO₂, NO₂, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

This facility is identified in 40 CFR 52.670(d), Subpart N in the Northern Ada County PM10 Maintenance Plan, and all applicable requirements from the Maintenance Plan of the State Implementation Plan (SIP) have been incorporated in this permit and remain in updated form by this permitting action (i.e., permit conditions: 2.1 through 2.8 and permit conditions 3.1 through 3.9.) A copy of the relevant SIP is included in Appendix .

Facility Classification

This permitting action is to convert the existing Tier II operation permit to a PTC. An increase in emissions or a physical change in the method of operation of permitted emission sources has not been proposed, therefore, no new emissions inventory is required. The facility classification remains unchanged.

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201Permit to Construct Required

The permittee has requested that a PTC be issued to this 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 58.01.01.401Tier II Operating Permit

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

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

IDAPA 58.01.01.301Requirement 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 PM₁₀, SO₂, NO_x, CO, VOC, and HAP or 10 tons per year for any one HAP or 25 tons per year for all HAP combined. 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 52.21Prevention of Significant Deterioration of Air Quality

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

NSPS Applicability (40 CFR 60)

The facility is subject to 40 CFR 60 Subpart Dc as the facility's Ludell Model DC10000 hot water heater/boiler was constructed after June 9, 1989, and has maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr.

Under current operation (10 MMBtu/hr and solely natural gas fired) the Ludell Model DC10000 hot water heater/boiler is subject to Recordkeeping requirements 40 CFR 60.48c(g)(1)-(3), (i) and Reporting requirements 60.48c(a), (j).

NESHAP Applicability (40 CFR 61)

The facility is not subject to any National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements in 40 CFR 61.

MACT/GACT Applicability (40 CFR 63)

The facility is subject to 40 CFR 63 Subpart JJJJJ as they operate an industrial, commercial, or institutional boiler as defined in § 63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP). However, under current operating parameters (natural gas fired) the facility's Ludell Model DC10000 hot water heater/boiler has no applicable 40 CFR 63 Subpart JJJJJ requirements as it is natural gas fired (per 40 CFR 63.11195(e)).

Permit Conditions Review

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

PERMIT SCOPE

Permit Condition 1.1 states the scope of this permitting action: converting an existing Tier II operating permit to a PTC

Permit Condition 1.2 states that this PTC replaces Tier II Operating Permit No. T2-2013.0050, issued on April 3, 2014.

Table 1.1 is updated to conform with existing Concrete Batch Plant General Permit Template.

FACILITY-WIDE CONDITIONS

Previous Permit Condition 2.1-2.5 has been updated to conform to the current Concrete Batch Plant General Permit Template language as new Permit Conditions 2.1-2.2 and 2.5.

Previous Permit Condition 2.6-2.7 has been updated to conform to the current Concrete Batch Plant General Permit Template language as new Permit Condition 2.4 and 2.7.

Previous Permit Conditions 2.8-2.10 remain unchanged but have been re-numbered as new Permit Conditions 2.3-2.5.

Previous Permit Conditions 2.11 has been updated to conform to the current Concrete Batch Plant General Permit Template language as new General Provisions Permit Condition 4.11.

Previous Permit Condition 2.12 has been removed as it is not included in current Concrete Batch Plant General Permit Template language.

Previous Permit Condition 2.13 has been updated to conform to the current Concrete Batch Plant General Permit Template language as new General Provisions Permit Condition 4.12.

Previous Permit Condition 2.14 has been removed as it is not included in current Concrete Batch Plant General Permit Template language.

Previous Permit Condition 2.15 has been removed as it is not included in current Concrete Batch Plant General Permit Template language.

Previous Permit Condition 2.16 has been removed as it is not included in current Concrete Batch Plant General Permit Template language.

Previous Permit Conditions 2.17 has been updated to conform to the current Concrete Batch Plant General Permit Template language as new Permit Condition 2.8 and new General Provisions Permit Condition 4.10.

Previous Permit Condition 2.18 has been updated to conform to the current Concrete Batch Plant General Permit Template language as new Permit Condition 2.3 and 2.6.

CONCRETE BATCH PLANT EQUIPMENT

Previous Permit Conditions remained unchanged except for the following:

Removed existing Appendix and Table 4.1 as follows to Section 3 of the permit:

Table 4.1 EMISSION LIMITS

East Boise Portable RMC		
Emission Limits^(a) – Hourly (lb/hr), and Annual^(b) – (T/yr)		
Source Description	Hourly PM₁₀^(c) Emissions (lb/hr)	Annual PM₁₀^(c) Emissions (T/yr)
Cement storage silo	3.7	0.6
All associated process emissions (fugitives included)		19.4

- a) As determined by a pollutant-specific EPA reference method, a Department-approved alternative, or as determined by the Department's emissions estimation methods used in this permit analysis.
- b) As determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.
- c) Includes condensibles.

Added Permit Condition 3.3, including Table 3.1, to continue limits for the cement storage silo and all associated process emissions (fugitives included) in the same format as the Appendix Table 4.1 of the Tier 2. Because the appendix is specifically mentioned in the SIP, along with the throughput limits, they were cited as being included in the Northern Ada County PM-10 Maintenance Plan, 2003.

PUBLIC REVIEW

Public Comment Opportunity

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04 or IDAPA 58.01.01.404.04.

Appendix A –State Implementation Plan Conditions

PART 52—[AMENDED]

1.The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart N—Idaho

2.Section 52.670 is amended by adding paragraph (c)(38) to read as follows:

§ 52.670

Identification of plan.

(c) ***

(38) The Idaho Department of Environmental Quality (Idaho DEQ, the State, or Idaho) submitted a PM10 maintenance plan and redesignation request for the Ada County/Boise, Idaho area on September 27, 2002, and provided supplemental information on July 10, 2003 and July 21, 2003.

(i) Incorporation by reference.

(A) The following terms and conditions limiting particulate matter emissions in the following permits:

(1) State of Idaho Air Pollution Operating Permit for LP Wood Polymers, Inc. Permit No. 001-00115, issued July 12, 2002, the following conditions: 1.1, 1.3, 3.1, and the Appendix.

(2) State of Idaho Air Pollution Operating Permit for Consolidated Concrete Company, Permit No. 001-00046, issued December 03, 2001, the following conditions: 1.1, 1.3, 2.3, 3.1, 3.2, and the Appendix. Start Printed Page 61110

(3) State of Idaho Air Pollution Operating Permit for Crookham Company, Permit No. 027-00020, issued January 18, 2002, the following conditions: 1.1, 1.3, 2.1, 2.3, 3.1, 3.1.1, 3.1.2, 3.2, and the Appendix.

(4) State of Idaho Air Pollution Operating Permit for Double D Service Center, Permit No. 001-00168, issued February 4, 2002, the following conditions: 1.1, 1.3, 3.1, 3.2.1, 3.2.2, 3.2.3, and the Appendix.

(5) State of Idaho Air Pollution Operating Permit for Plum Creek Northwest Lumber, Inc., Permit No. 001-00091, issued July 12, 2002, the following conditions: 1.1, 1.3, 2.1.2, 3.1, and the Appendix.

(6) State of Idaho Air Pollution Operating Permit for C. Wright Construction, Inc., Permit No. T2-000033, issued July 08, 2003, the following conditions: 2 (heading only), 2.5, (2.12, Table 2.2 as it applies to PM10), 2.14, 3 (heading only), 3.3, Table 3.2, 3.4, 3.5, 3.6, 3.7, 3.8, 3.10, 4 (heading only), 4.2, 4.3, 4.4, 4.7, 5, and Table 5.1.

(7) State of Idaho Air Pollution Operating Permit for Nelson Construction Co., Permit No. T2-020029, issued July 21, 2003, the following conditions: 2 (heading only), 2.12, 2.14, 3 (heading only), 3.3, 3.4, 3.6, 3.7, 3.9, 3.10, 3.11, 3.12, 4 (heading only), 4.3, 4.4, 4.5, 4.6, 5, and Table 5.1.

(8) State of Idaho Air Pollution Operating Permit for Mike's Sand and Gravel, Permit No. 001-00184, issued July 12, 2002, the following conditions: 1.1, 1.3, 2.2.1, 3.1, and the Appendix.

(9) State of Idaho Air Pollution Operating Permit for Idaho Concrete Co., Permit No. T2-020031, issued July 8, 2003, the following conditions: 2 (heading only), 2.5, 2.13, 3 (heading only), 3.3, 3.4, 3.6, 3.7, 3.8, 4 (heading only), and Table 4.1.

10) State of Idaho Air Pollution Operating Permit for Idaho Concrete Co., Permit No T2-020032, issued July 8, 2003, the following conditions: 2 (heading only), 2.5, 2.13, 3 (heading only), 3.3, 3.4, 3.6, 3.7, 3.8, 4 (heading only), and Table 4.1.

(11) State of Idaho Air Pollution Operating Permit for Idaho Concrete Co., Permit No. T2-020033, issued July 8, 2003, the following conditions: 2 (heading only), 2.5, 2.13, 3 (heading only), 3.3, 3.4, 3.6, 3.7, 3.8, 4 (heading only), and Table 4.1.

APPENDIX B – FACILITY DRAFT COMMENTS

The following comments were received from the facility on February 12, 2019:

Facility Comment: Should permit condition 2.8 referencing a daily visible emissions inspection match the weekly inspection of fugitive and visible emissions of permit conditions 2.1 and 2.4?

DEQ Response: DEQ concurs; permit conditions 2.8 language has been updated to require a weekly inspection in line with language of permit condition 2.1 and 2.4.

Facility Comment: Table 1.1 under Concrete Batch Plant lists “Max. Production Capacity” in units of yd³/yr. It should read yd³/hr.

DEQ Response: DEQ concurs; yd³/yr is a typo. Units have been updated to yd³/hr.

Facility Comment: The last sentence of paragraph one of permit condition 2.3 reads, “These provisions shall not apply when the presence of uncombined water, NO_x, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section”. Uncombined water, NO_x, and/or chlorine gas are never expected to be present at the facility so this language appears odd. Should it be updated?

DEQ Response: Visible Emissions Permit Conditions 2.3 through 2.5 are taken directly from the facility’s previous Tier II permit. Since the facility doesn’t expect uncombined water, NO_x, and/or chlorine gas to ever be a practical issue, permit condition language will remain unchanged.

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: Staker & Parson dba Idaho Concrete
Address: Portable
City:
State:
Zip Code:
Facility Contact: Pat Clark
Title:
AIRS No.: 777-00151

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	0.0	0	0.0
SO ₂	0.0	0	0.0
CO	0.0	0	0.0
PM10	0.0	0	0.0
VOC	0.0	0	0.0
Total:	0.0	0	0.0
Fee Due	\$ 1,000.00		

Comments: