

## **Statement of Basis**

**Permit to Construct No. P-2019.0001  
Project ID 62158**

**Staker & Parson dba Idaho Concrete 00106  
Portable, currently located at 155 Amity Road  
Boise, Idaho**

**Facility ID 777-00106**

**Final**

**February 27, 2019**

**Tom Burnham  
Permit Writer**

Handwritten signature of Tom Burnham in black ink, consisting of the letters 'LB' in a stylized, cursive font.

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.

**ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE .....3**

**FACILITY INFORMATION .....4**

    DESCRIPTION ..... 4

    PERMITTING HISTORY ..... 4

    APPLICATION SCOPE..... 4

    APPLICATION CHRONOLOGY ..... 5

**TECHNICAL ANALYSIS .....6**

    EMISSIONS UNITS AND CONTROL EQUIPMENT .....6

    EMISSION INVENTORIES ..... 7

    AMBIENT AIR QUALITY IMPACT ANALYSES..... 7

**REGULATORY ANALYSIS.....7**

    ATTAINMENT DESIGNATION (40 CFR 81.313)..... 7

    FACILITY CLASSIFICATION..... 7

    PERMIT TO CONSTRUCT (IDAPA 58.01.01.201)..... 7

    TIER II OPERATING PERMIT (IDAPA 58.01.01.401)..... 7

    TITLE V CLASSIFICATION (IDAPA 58.01.01.300, 40 CFR PART 70) ..... 7

    PSD CLASSIFICATION (40 CFR 52.21) ..... 8

    NSPS APPLICABILITY (40 CFR 60)..... 8

    NESHAP APPLICABILITY (40 CFR 61)..... 8

    MACT/GACT APPLICABILITY (40 CFR 63)..... 8

    PERMIT CONDITIONS REVIEW ..... 8

**PUBLIC REVIEW .....9**

    PUBLIC COMMENT OPPORTUNITY ..... 9

**APPENDIX A –STATE IMPLEMENTATION PLAN CONDITIONS.....10**

**APPENDIX B – PROCESSING FEE.....12**

## 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 <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> 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 <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operation and maintenance
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
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 <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
SOB	Statement of Basis
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 <sup>3</sup>	micrograms per cubic meter
VOC	volatile organic compounds
yd <sup>3</sup>	cubic yards

## **FACILITY INFORMATION**

### ***Description***

Staker & Parson Companies dba Idaho Concrete 00106 is a portable truck mix 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).

January 29, 2014	T2-2013.0048 project 61255 was renewed with no changes. Permit status (A), but will become (S) upon issuance.
August 5, 2008	PTC/T2 777-00106 was a renewal issued to Idaho Concrete. Permit status (S).
July 8, 2003	PTC/T2 777-00106 was issued to Idaho Concrete for limiting PM <sub>10</sub> emissions from this facility as part of the Northern Ada County PM <sub>10</sub> Maintenance Plan. Permit status (S).
August 7, 2002	PTC 777-00106 was issued to Staker & Parson Companies dba Idaho Concrete. It was a name change from Treasure Valley Concrete. Permit status (S).
February 4, 2000	PTC 777-00106 was issued to Monroc to operate in non-attainment area for a portable source. Permit status (S).
March 21, 1997	PTC 777-00106 was issued to Treasure Valley Concrete to the throughput to 2457 cubic yards per day. Permit status (S).
November 17, 1995	PTC 777-00106 was issued to Treasure Valley Concrete to increase the throughput. Permit status (S).
July 15, 1995	PTC 777-00106 was issued to the facility named Treasure Valley Concrete. Permit status (S).

### ***Application Scope***

The applicant has agreed to conversion of their Tier II (T2) operating permit to a Permit to Construct (PTC) and has paid \$1,000 PTC application fee.

This facility is identified in 40 CFR 52.670(d), Subpart N in the Northern Ada County PM<sub>10</sub> Maintenance Plan, and all applicable requirements from the Maintenance Plan of the State Implementation Plan (SIP) have been incorporated into this permit and remain in updated form by this permitting action (i.e., Current Permit Conditions: 2.1 through 2.11 and Permit Condition 3.1 through 3.8. A copy of the relevant SIP is included in Appendix A.

### ***Application Chronology***

December 27, 2018	DEQ received an application.
January 2, 2019	DEQ received notification that an application fee was wire transferred.
January 4, 2019	DEQ determined that the application was incomplete.
January 4, 2019	DEQ received supplemental information from the applicant.
January 7, 2019	DEQ determined that the application was complete.
January 8, 2019	DEQ received an application fee.
January 22, 2018	DEQ made available the draft permit and statement of basis for peer and regional office review.
February 1, 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

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

Source ID No.	Sources <sup>(a)</sup>	Control Equipment	Emission Point ID No.
Materials Handling <sup>(a)</sup>	<u>Material Transfer Points:</u> Materials handling Concrete aggregate transfers Truck unloading of aggregate Aggregate conveyor transfers Aggregate handling	Fugitive best management practices (BMP)	N/A
Concrete Mixer	<u>Concrete Batch Plant</u> Manufacturer: Ross Model: Bandit Manufacture Date: 1978 Max. Production Capacity: 200 yd <sup>3</sup> /hr, Permitted Production Rate: 500,000 yd <sup>3</sup> /yr  <u>Cement Storage Silo<sup>(a)</sup>:</u> Storage capacity: 50 cubic yards (yd <sup>3</sup> ) Bin Vent Filter/Baghouse Manufacturer <sup>(b)</sup> : Ross Model: Bandit  <u>Second Cement Storage Silo:</u> Storage capacity: 72 cubic yards (yd <sup>3</sup> ) Bin Vent Filter/Baghouse Manufacturer <sup>(b)</sup> : C&W Model: CP-305  <u>Fly Ash Storage Silo:</u> Storage capacity: 72 cubic yards (yd <sup>3</sup> ) Bin Vent Filter/Baghouse Manufacturer <sup>(b)</sup> : C&W Model: CP-LRP-6  <u>Second Fly Ash Storage Silo:</u> Storage capacity: 72 cubic yards (yd <sup>3</sup> ) Bin Vent Filter/Baghouse Manufacturer <sup>(b)</sup> : C&W Model: CP-LRP-6	<u>Weigh Batcher Baghouse:</u> Manufacturer: Ross Model: Bandit PM <sub>10</sub> /PM <sub>2.5</sub> control efficiency: 99%  <u>Cement Storage Silo Bin Vent Filter/Baghouse:</u> Manufacturer: Ross Model: Bandit PM <sub>10</sub> /PM <sub>2.5</sub> control efficiency: 99%  <u>Second Cement Storage Silo Bin Vent Filter/Baghouse</u> Manufacturer: C&W Model: CP-305 PM <sub>10</sub> /PM <sub>2.5</sub> control efficiency: 99%  <u>Fly Ash Storage Silo Bin Vent Filter/Baghouse:</u> Manufacturer: C&W Model: CP-LRP-6 PM <sub>10</sub> /PM <sub>2.5</sub> control efficiency: 99%  <u>Second Fly Ash Storage Silo Bin Vent Filter/Baghouse:</u> Manufacturer: C&W Model: CP-LRP-6 PM <sub>10</sub> /PM <sub>2.5</sub> control efficiency: 99%  <u>Truck Load-out :</u> Control: Shroud PM <sub>10</sub> /PM <sub>2.5</sub> control efficiency: 75%	<u>Weigh Batcher Baghouse Exhaust:</u> Exit height: 45 ft (13.7 m) Exit diameter: 2.5 ft (0.76 m) Exit flow rate: 140 acfm Exit temperature: ambient  <u>Cement Storage Silo Bin Vent Filter/Baghouse Exhaust:</u> Exit height: 35 ft (10.7 m) Exit diameter: 2.5 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: 70 ft (21.3 m) Exit diameter: 3.5 ft (1.1 m) Exit flow rate: 1,700 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 ft (1.2 m) Exit flow rate: 1,760 acfm Exit temperature: ambient  <u>Second Fly Ash Storage Silo Bin Vent Filter/Baghouse</u> Exit height: 65 ft (19.8 m) Exit diameter: 4 ft (1.2 m) Exit flow rate: 1,760 acfm Exit temperature: ambient
Boiler	<u>Boiler:</u> Manufacturer: Kemko Model: 7MMBtu Manufacture Date: 2018 Heat input rating: 7.0 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 cement supplement storage silo baghouses are process equipment as they are part of the physical and operational design of the silos; PM<sub>10</sub> 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<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

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) (i.e., conditions: 2.1 through 2.11 and condition 3.1 through 3.8. from the previously active Tier II permit) have been incorporated in this permit and remain in updated form by this permitting action. A copy of the relevant SIP is included in Appendix A.

**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 58.01.01.201 ..... Permit 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 58.01.01.401 ..... Tier II Operating Permit

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

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

IDAPA 58.01.01.301 ..... Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, 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 52.21..... 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)**

Non-applicability

The boiler is not subject to Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units because the boiler’s heat input capacity (i.e., 4.1 MMBtu/hr) is below 100 MMBtu/hr to be subject to the subpart.

The boiler is not subject to Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units because the boiler’s heat input capacity (i.e., 4.1 MMBtu/hr) is below 10 MMBtu/hr to be subject to the subpart.

**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 not subject to any Maximum Available Control Technology (MACT) standards in 40 CFR 63.

The facility could be subject to Generally Available Control Technology (GACT) Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, but is exempt as a gas-fired boiler 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 2 Operating Permit No. T2-2013.0048 issued January 29, 2014.

Table 1.1 is taken from the existing Tier 2 operating permit. The footnote is taken from the current template for a concrete batch plant (CBP).

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 STORAGE SILO AND APPENDIX**

Previous Permit Conditions remained unchanged except for the following:

Removed existing Appendix and Table 4.1 as follows:

**Table 4.1 EMISSION LIMITS**

<b>East Boise Portable RMC</b>		
<b>Emission Limits<sup>(a)</sup> – Hourly (lb/hr), and Annual<sup>(b)</sup> – (T/yr)</b>		
<b>Source Description</b>	<b>Hourly PM<sub>10</sub><sup>(c)</sup> Emissions (lb/hr)</b>	<b>Annual PM<sub>10</sub><sup>c</sup> Emissions (T/yr)</b>
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.

## Appendix B – 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 00106  
**Address:** 2350 S 1900 W  
**City:** Ogden  
**State:** UT  
**Zip Code:** 84401  
**Facility Contact:** Patrick Clark  
**Title:** Environmental Advisor  
**AIRS No.:** 777-00106

**N** Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N

**Y** Did this permit require engineering analysis? Y/N

**N** Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

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

**Comments:** T2 to PTC conversion required research into the North Ada County PM10 SIP, old permit emissions inventory and modeling.