

# **Statement of Basis**

**Permit to Construct No. P-2013.0012  
Project ID 61157**

**Holcim (US) INC  
Bliss, Idaho**

**Facility ID 047-00013**

**Final**

**May 7, 2013**

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

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## ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
CEMS	continuous emission monitoring systems
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
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EF	emission factor
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gases
HAP	hazardous air pollutants
hrs/day	hours per day
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pounds per hour
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
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
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SIP	State Implementation Plan
SM	synthetic minor
SO <sub>2</sub>	sulfur dioxide
T/yr	tons per consecutive 12 calendar month period
TAP	toxic air pollutants
U.S.C.	United States Code
VOC	volatile organic compounds

## FACILITY INFORMATION

### Description

The Holcim (US) Incorporated Bliss facility (Holcim) is a Portland cement transfer terminal. The emissions sources at the facility are all related to material handling activities: driving vehicles on paved roads and moving Portland cement from rail cars to storage silos and from storage silos to trucks. Baghouse filters control emissions from railcar unloading and truck loading.

### Permitting History

This is a permit to construct (PTC) revision to convert the existing Tier II operating permit (T2) No. T2-2007.0220, issued March 7, 2008 to facility-wide PTC.

The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

March 7, 2008            T2-2007.0220, Tier II operating permit and Permit to Construct (PTC) renewal. Permit status: (A, but will become S upon issuance of this permit).

April 1, 2003            T2/PTC No. T2-030404, permit revision. Permit status: (S)

December 11, 2002      Initial T2/PTC No. 047-00013. Permit status: (S).

### Application Scope

This project is to renew the facility's existing T2/PTC No. T2-2007.0220, issued March 7, 2008 and to convert the T2/PTC to PTC.

### Application Chronology

February 19, 2013            DEQ received an application and the application fees.

March 18, 2013            DEQ determined that the application was complete.

April 5, 2013            DEQ made available the draft permit and statement of basis for peer and regional office review.

April 16, 2013            DEQ made available the draft permit and statement of basis for applicant review.

April 29, 2013            DEQ received the permit processing fee.

May 8, 2013            DEQ issued the final permit and statement of basis.

## TECHNICAL ANALYSIS

### Emissions Units and Control Equipment

Table 1 EMISSION UNITS AND CONTROL DEVICE INFORMATION

Permit Sections	Source Description	Emissions Control(s)
2	Storage silo bin/railcar and truck unloading Material handling - railcar unloading into storage silos. Maximum unloading rate - 200 tons Portland cement per hour.	Baghouse filter: Manufacturer - DCL Maximum air flow - 600 acfm Stack diameter - 5.75 inches square Stack height - 77.5 feet Outlet loading - 0.05 gr/dscf

2	<u>Truck loading</u> Material handling - loading from storage silo to truck. Maximum unloading rate - 300 tons Portland cement per hour.	<u>Baghouse filter:</u> Manufacturer - Midwest Maximum air flow - 1,500 acfm Stack diameter - 7.5 inches Stack height - 33.7 feet Outlet loading - 0.05 gr/dscf

**Emissions Inventories**

Since this proposed project is only for a renewal of the existing T2 permit that is expiring and it is also to convert the permit to PTC, emissions will not change as a result of issuance of this permit. The emission inventory existed in the permit No. T2-2007.0220, issued March 7, 2008 is used for this permitting action. All emission rates (except the PM from unpaved road rates) and throughput limits in the existing permit are carried over to the revised permit with no change in emissions rates as a result of this permitting action.

There is no emission inventory for the greenhouse gases from the facility since there are no combustion sources existing at the facility. Thus, the carbon dioxide gas emissions and its equivalent (CO<sub>2</sub>e) are equal to zero.

The PTC emissions processing fee calculation are shown in Appendix A.

**Ambient Air Quality Impact Analyses**

Since emissions will not increase as a result of this permitting action, the ambient impact analysis is not required.

**REGULATORY ANALYSIS**

**Attainment Designation (40 CFR 81.313)**

The facility is located in Gooding County, which is designated as attainment or unclassifiable for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

**Facility Classification**

The facility's Aerometric Information Retrieval System (AIRS) remains as "SM" and is not changed by this permitting action.

**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 to renew the existing Tier II operating permit that is expiring. 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

At the recommendation of Idaho DEQ the applicant did not apply for a Tier II operating permit in accordance with IDAPA 58.01.01.401. Instead the applicant requested, in writing, that the existing/expiring Tier II operating permit be replaced by a PTC to avoid recurring renewals and fees. This request is consistent with current permitting practice. Therefore, the requirements under IDAPA 58.01.01.400-410 do not apply and a PTC will be issued instead.

**Visible Emissions (IDAPA 58.01.01.625)**

IDAPA 58.01.01.625 ..... Visible Emissions

The sources of PM<sub>10</sub> emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Condition 2.3.

**Standards for New Sources (IDAPA 58.01.01.676)**

IDAPA 58.01.01.676 .....Standards for New Sources

There are no boilers existing at the facility; therefore, the fuel burning equipment rules are not applicable to the facility.

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

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

Facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for criteria pollutants (i.e., PM<sub>2.5</sub>, 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 HAPs combined as demonstrated for previously issued permits. 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. To see a list of previously issued permits, refer to the Permit History section above.

**PSD Classification (40 CFR 52.21)**

40 CFR 52.21 .....Prevention of Significant Deterioration of Air Quality

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

**NSPS Applicability (40 CFR 60)**

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

**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 Applicability (40 CFR 63)**

40 CFR 63, Subpart LLL                      National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry

**40 CFR 63.1340 What parts of my plant does this subpart cover?**

- (a) The provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in § 63.2.
- (b) The affected sources subject to this subpart are:
  - (1) Each kiln including alkali bypasses and inline coal mills, except for kilns that burn hazardous waste and are subject to and regulated under subpart EEE of this part;
  - (2) Each clinker cooler at any portland cement plant;
  - (3) Each raw mill at any portland cement plant;
  - (4) Each finish mill at any portland cement plant;
  - (5) Each raw material dryer at any portland cement plant;

- (6) Each raw material, clinker, or finished product storage bin at any portland cement plant that is a major source;
  - (7) Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln at any portland cement plant that is a major source;
  - (8) Each bagging and bulk loading and unloading system at any portland cement plant that is a major source; and
  - (9) Each open clinker storage pile at any portland cement plant.
- (c) Onsite sources that are subject to standards for nonmetallic mineral processing plants in subpart 000, Part 60 of this chapter are not subject to this subpart. Crushers are not covered by this subpart regardless of their location.
- (d) If you are subject to any of the provisions of this subpart you are also subject to title V permitting requirements.

The 40 CFR 63.1341, Subpart LLL defines Portland Cement Plant as “any facility manufacturing portland cement”. Holcim does not manufacture portland cement; therefore, the sources at this facility are not affected sources subject to NESHAP in 40 CFR Part 63, and this permitting action does not alter the applicability status of existing affected sources at the facility.

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

This section describes the permit conditions for this revised permit issued to renew an existing Tier II operating permit. Note that some minor editing may have been done on the existing permit conditions, but the substantive meaning of those conditions has not been changed.

Existing Permit Conditions:

#### **Permit Condition 2.3 - PM<sub>10</sub> and Lead Emission Limits**

The PM<sub>10</sub> and lead emission limits in Table 5.1 of the existing permit No. T2-2007.0220, issued on March 7, 2008 are carried over into this initial PTC. To demonstrate compliance with these emissions limits, the permittee can use a calculation method as shown in the PTC application received by DEQ on February 15, 2013. In the emission estimates the permittee must use emission factors (EF) for PM<sub>10</sub> from AP-42 for the process existing at the facility and use a throughput of Portland cement of 700,000 T/yr at a maximum of 200 tons per hour.

The following changes in Table 5.1 (Emission Limits) of the existing permit No. T2-2007.0220, issued on March 7, 2008:

**Travel on Unpaved Roads.** The PM<sub>10</sub> emissions limits in the table are deleted by DEQ. DEQ determined that compliance with a numerical fugitive PM<sub>10</sub> emission limits from the unpaved roads can't be determined. All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with the fugitive dust requirements of Permit Condition 2.5 and IDAPA 58.01.01.650-651. Compliance with the fugitive dust requirements under Permit Condition 2.5 is assured by following the operating, monitoring and recordkeeping requirements listed in Permit Conditions 2.11, 2.12, and 2.13. In addition, the facility indicated in the application on February 15, 2013, that the unpaved roads at the facility are paved to minimize dust emissions.

**Lead Emissions.** The lead short-term and long-term emission rate limits in the table are deleted by DEQ. The lead emission rates from the Storage Silo/Railcar Unloading and from the Truck Loading processes are below the modeling thresholds (100 pounds/month) for that pollutant. The lead emissions from these sources would be inherently limited by the mandated throughput limits that are included in Permit Condition 2.8. The throughput limit is set in Permit Condition 2.8 to 700,000 tons per any consecutive 12-month period.

Permit Condition 2.6 (Odors). The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution in accordance with the odor requirements of Permit Condition 2.6 and IDAPA 58.01.01.775-776. Compliance with the odor requirements under Permit Condition 2.6 is assured by following the operating, monitoring and recordkeeping requirements in Permit Condition 2.6. The requirements in Permit Condition 2.6 were updated to match the latest version being used in air permits template.

Permit Condition 2.7 (Open Burning). If open burning is conducted at the facility, the open burning requirements apply per Permit Condition 2.7 and IDAPA 58.01.01.600-624. The requirement in Permit Condition 2.7 was updated to match the latest version being used in air permits template.

Permit Conditions 2.8 sets limit for the throughput of Portland cement unloaded from the railcars to the storage silos to an amount not to exceed 700,000 tons per any consecutive 12-month period.

Also Permit Condition 2.8 sets limit for the throughput of Portland cement unloaded from the storage silos to trucks to an amount not to exceed 700,000 tons per any consecutive 12-month period railcars to the storage silos to an amount not to exceed 700,000 tons per any consecutive 12-month period.

Permit Condition 2.8 existed in the T2/PTC No. T2-2007.0220, issued March 7, 2008. This permit condition was carried over to this initial PTC from the previous permit. Compliance with this permit condition is determined by Permit Condition 2.15 (Throughput Monitoring).

New Permit Condition 2.14 (Reports and Certifications) is included in this PTC to match the latest version being used in air permits template.

### **PTC General Provisions:**

The most current version of PTC General Provisions is used in this permit, as described below:

The duty to comply general compliance provision requires that the permittee comply with all of the permit terms and conditions pursuant to Idaho Code §39-101.

The maintenance and operation general compliance provision requires that the permittee maintain and operate all treatment and control facilities at the facility in accordance with IDAPA 58.01.01.211.

The obligation to comply general compliance provision specifies that no permit condition is intended to relieve or exempt the permittee from compliance with applicable state and federal requirements, in accordance with IDAPA 58.01.01.212.01.

The inspection and entry provision requires that the permittee allow DEQ inspection and entry pursuant to Idaho Code §39-108.

The requirement in Permit Condition 40 that "this permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year" does not apply to this renewal permit. This is because the sources described in the application for this permit qualified for a PTC exemption instead of being required to obtain a PTC.

The construction and operation notification provision in Permit Condition 41 requires that the permittee notify DEQ of the dates of construction and operation, in accordance with IDAPA 58.01.01.211. For this renewal permit, the notification requirements in Permit Condition 41 do not apply. This is because the sources described in the application for this permit qualify for a PTC exemption instead of being required to obtain a PTC.

The performance testing notification of intent provision requires that the permittee notify DEQ at least 15 days prior to any performance test to provide DEQ the option to have an observer present, in accordance with IDAPA 58.01.01.157.03.

The performance test protocol provision requires that any performance testing be conducted in accordance with the procedures of IDAPA 58.01.01.157, and encourages the permittee to submit a protocol to DEQ for approval prior to testing.

The performance test report provision requires that the permittee report any performance test results to DEQ within 30 days of completion, in accordance with IDAPA 58.01.01.157.04-05.

The monitoring and recordkeeping provision requires that the permittee maintain sufficient records to ensure compliance with permit conditions, in accordance with IDAPA 58.01.01.211.



The excess emissions provision requires that the permittee follow the procedures required for excess emissions events, in accordance with IDAPA 58.01.01.130. If a reportable excess emission event occurs, send the notifications to the DEQ Coeur d'Alene Regional Office as described in the rule.

The certification provision requires that a responsible official certify all documents submitted to DEQ, in accordance with IDAPA 58.01.01.123.

The false statement provision requires that no person make false statements, representations, or certifications, in accordance with IDAPA 58.01.01.125.

The tampering provision requires that no person render inaccurate any required monitoring device or method, in accordance with IDAPA 58.01.01.126.

The transferability provision specifies that this permit to construct is transferable, in accordance with the procedures of IDAPA 58.01.01.209.06.

The severability provision specifies that permit conditions are severable, in accordance with IDAPA 58.01.01.211.

## **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 58.01.01.40

## APPENDIX A – PROCESSING FEE