

Statement of Basis

**Permit to Construct No. P-2010.0043
Project ID 61325**

**The Amalgamated Sugar Company, LLC (TASCO-Paul)
Paul, Idaho**

Facility ID 067-00001

Final

March 18, 2014
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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

ASTM	American Society for Testing and Materials
CAA	Clean Air Act
CaO	calcium oxide (lime)
CaCO ₃	calcium carbonate
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gases
gpm	gallons per minute
HAP	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
iwg	inches of water gauge
lb/hr	pounds per hour
MMBtu	million British thermal units
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
No.	number
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operation and maintenance
O ₂	oxygen
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
PW	process weight rate
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
SIP	State Implementation Plan
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
TAP	toxic air pollutants
U.S.C.	United States Code
VOC	volatile organic compounds

FACILITY INFORMATION

Description

The Amalgamated Sugar Company, LLC (TASCO-Paul) operates an existing beet sugar manufacturing plant that is located in Paul, Idaho. At this facility, the lime kiln produces calcium oxide (CaO) and carbon dioxide (CO₂) gas for beet juice purification. The CaO from the kiln is transferred to the process slaking system (S-K2). The CO₂ gas from the kiln passes through a two-stage high efficiency gas washer scrubbing system (A-K1). The gas washer scrubs and cools the exhaust gas prior to the compressors. The compressors convey the CO₂ gas to the first and second carbonation tanks in parallel. The gas is bubbled through the beet juice from the bottom of the carbonation tanks. During carbonation, the CO₂ is re-combined with CaO to form CaCO₃, a precipitant that removes impurities from the juice.

Application Scope and Chronology

This project is a revision of a permit to construct (PTC) for an existing Tier I facility. The applicant has proposed to remove the process slaker control equipment and associated permit requirements. Transitional requirements associated with the replacement of the Union Carbide and Belgian lime kilns with the Eberhardt lime kiln now in operation have also been removed.

Table 1 APPLICATION CHRONOLOGY

Date	Description
February 3, 2014	DEQ received an application (2014AAG301).
February 10, 2014	DEQ received an application fee.
February 28, 2014	DEQ made available the draft permit and statement of basis for peer and regional office review.
March 3, 2014	DEQ determined that the application was complete (2014AAG381).
March 3, 2014	DEQ made available the draft permit and statement of basis for applicant review (2014AAG380[v1], 2014AAG379[v1]).
March 13, 2014	DEQ received comments from the applicant regarding the draft permit and supporting documents (2014AAG455, 2014AAG469).
March 13, 2014	DEQ received the permit processing fee.
March 18, 2014	DEQ issued the final permit and statement of basis (2014AAG380[v2], 2014AAG379[v2]).

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), superseded (S), or terminated (T).

Table 2 PERMITTING HISTORY

Issue Date	Permit Number	Project	Status	History Explanation
January 1, 1984	1020-0001 (067-00001)	Facility Operating Permit.	S	Revised by P-020407.
February 12, 2002	9503-039-1 (067-00001)	Initial Tier I permit.	S	Revised by T1-030416.
September 23, 2002	P-020407 (067-00001)	Modification to add No. 6 evaporator to multi-effect evaporator system. Throughput limits established at 16,550 beet slice T/day, 2,966,000 beet slice T/yr, and 7 MMcwt/yr sugar production.	S	Revised 1020-0001. Revised by P-050401.
February 3, 2005	P-050401	Revision to replace the sugar production limit of 7 MMcwt/yr with a steam production limit of 1,830,000 klb steam/yr.	S	Revised P-020407. Revised by P-050421.
July 27, 2005	P-050406	Construction of NG-fired backup Nebraska Boiler.	A	
September 23, 2005	T1-030416	Tier I administrative amendment to incorporate revisions resulting from an appeal.	A	Revised 9503-039-1.
November 17, 2005	P-050424	Modification to add temporary emergency generator.	T	Superseded Director exemption issued 10/28/05. Terminated by letter O-050426 issued 1/06/06.
December 15, 2005	P-050421	Revision to increase daily throughput limit from 16,550 to 19,550 beet slice T/day.	S	Revised P-050401. Revised by P-060404.
June 14, 2006	P-060404	Revision to increase annual throughput limit from 2,966,000 to 3,200,000 beet slice T/yr.	S	Revised P-050421. Revised by P-2007.0023.
May 16, 2007	P-2007.0023	Revision to temporarily increase steam production in 2006 by +110,000 klb steam/yr to process +64,000 T/yr of thick juice.	A	Revised P-060404.
August 20, 2008	O-2008.0082	Applicability concurrence determining the use of anthracite coal in addition to coke as fuel was not a modification.	A	
September 22, 2010	P-2010.0043	Initial PTC to replace two existing lime kilns, process slaking system, and associated equipment with one new lime kiln, process slaker, and associated equipment.	S	
June 1, 2012	P-2010.0043 PROJ 61012	Revised PTC to replace wet scrubber with water spray control equipment for the process slaker (S-K2).	S	
March 18, 2014	P-2010.0043 PROJ 61325	Revised PTC to remove process slaker control equipment and associated permit requirements.	A	

TECHNICAL ANALYSIS

Emission Units and Control Equipment

Table 3 Emission Units and Control Equipment

Emission Unit	Control Equipment
<u>Lime Kiln System (S-K1)</u> Manufacturer: Eberhardt Model: KR 8.0 (forced draft, vertical) Manufacture date: 2011 Maximum capacity: 770 T/day lime rock Maximum operation: 146,300 T/yr lime rock Fuel: anthracite coal and/or coke Fuel consumption: 55.2 T/day, 59 MMBtu/hr	Gas Washer First Carbonation Tank Second Carbonation Tank (A-K1)
<u>Process Slaker (S-K2)</u> Manufacturer: May Foundry Model: Eberhardt KR 8.0 Manufacture date: 2011 Maximum capacity: 394 T/day CaO Maximum operation: 74,860 T/yr CaO	None

Emission Inventories and Ambient Air Quality Impacts

The emission inventory estimates and ambient air quality impact analyses presented in the initial kiln replacement project remain applicable (PTC No. P-2010.0043, issued on September 22, 2010).¹

Although actual PM emissions from the process slaker measured during performance testing were below that of the initial emissions estimates,² the applicant has not requested credit for an emissions reduction at this time. Because this project will not result in an emissions increase, nor in substantive changes to stack exhaust conditions, the initial ambient air quality impact analyses were not revisited.

¹ Uncontrolled actual emissions were below the controlled emission estimates relied upon in the technical and regulatory applicability analysis, as presented in the Statement of Basis to PTC No. P-2010.0043 issued September 22, 2010 (2010AAG1506[v2]). These analyses remain applicable following processing of this permitting action.

² Actual emissions were measured during performance testing and reported in "Performance Test Reports for the B&W Boiler, North and South Pulp Dryers, Lime Kiln and Lime Slaker," TASCOPaul, January 21, 2013 (2013AAI184, 2013AAI183). A summary of measured emission rates is provided in Table 4 of the Permit Conditions Review section.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Minidoka 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.

Permit to Construct (IDAPA 58.01.01.201)

An application was submitted requesting a revised PTC. Therefore, this permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228. This PTC has been processed in accordance with IDAPA 58.01.01.209.05.a; the applicable requirements contained in this PTC will be incorporated into the Tier I operating permit during renewal.

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

TASCO-Paul is classified as a major facility as defined in IDAPA 58.01.01.008.10, because the estimated emissions of criteria pollutants and HAP have the potential to exceed major source thresholds. This PTC has been processed in accordance with IDAPA 58.01.01.209.05.a; the applicable requirements contained in this PTC will be incorporated into the Tier I operating permit during renewal. It should be noted that operating permit requirements applicable to the existing process slaker and lime kiln (Sections 6 and 7 of Tier I Operating Permit T1-030416) might require revision as a result of this (and related) permitting action(s).

PSD Classification (40 CFR 52.21)

TASCO-Paul is classified as an existing major stationary source, because the estimated emissions of criteria pollutants have the potential to exceed major stationary source thresholds.

Because TASCO-Paul contains a fossil-fuel boiler (or combination thereof) of more than 250 MMBtu/hr heat input, it has been classified as a designated facility as defined in IDAPA 58.01.01.006.30 and in 40 CFR 52.21(b)(1)(i)(a), and fugitive emissions were included when determining the major facility classification in accordance with IDAPA 58.01.01.008.10.c.i, and when determining net emissions increases for projects in accordance with IDAPA 58.01.01.007 and 40 CFR 52.21(b)(48)(ii).

Because the removal of process slaker control equipment and associated permit requirements is not predicted to result in an actual emissions increase above significance thresholds, and is not predicted to increase the utilization of any emissions unit, the project was not applicable to PSD program requirements.^{1,2}

NSPS & NESHAP Applicability (40 CFR 60, 61 & 63)

The process slaker is not an affected source subject to NSPS and/or NESHAP requirements in 40 CFR Parts 60, 61, and/or 63. The proposed revisions are not expected to alter the applicability status of any existing affected sources at the plant.

In accordance with 40 CFR 60.340(a), the kiln is not applicable to the requirements of Subpart HH – Standards of Performance for Lime Manufacturing Plants, because the kiln is not a rotary kiln as defined in 40 CFR 60.341(d) (it is a vertical kiln).

In accordance with 40 CFR 63.7081(a), the lime manufacturing plant is not applicable to the requirements of Subpart AAAAA – National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants, because the lime manufacturing plant is located at a beet sugar manufacturing plant, as defined in 40 CFR 60.341(d).

Permit Conditions Review

This section describes only those permit conditions that have been revised by this permitting action.

The requirements of this permit do not contravene and are not intended to contravene any permit conditions in any other applicable Tier I, Tier II, or PTC permits (refer to Table 2 in the Permitting History section for information regarding active permits). The permittee must continue to comply with all applicable permits.

Revised Permit Condition 2.10 (Permit Condition 12 of P-2010.0043 PROJ 61012)

Within 60 days after initial startup of the kiln, the permittee shall develop and submit to DEQ an Operation and Maintenance (O&M) manual for review and comment at the address provided (Permit Condition 16). Any changes to the O&M manual shall be submitted to DEQ for review and comment within 15 days of the change.

Because the O&M manual was developed and submitted to DEQ, these requirements were considered satisfied, and were removed.³ Ongoing maintenance of, and compliance with, these documents is required.

Revised Permit Condition 2.11 (Permit Condition 13 of P-2010.0043 PROJ 61012)

The O&M manual shall be a permittee developed document based upon, but independent from, the manufacturer supplied operating manual(s). For each of the control equipment described in the Regulated Emission Point Sources Table (Permit Condition 1), the O&M manual shall include, at a minimum:

- *a general description of the control equipment;*
- *procedures that will be followed to ensure compliance with the kiln emission limits (Permit Condition 17), the process slaker emission limit (Permit Condition 36), the control equipment maintenance and operation general provision (Permit Condition 44), and the manufacturer's specifications;*
- *the recommended minimum value that shall be maintained for the water flow rate to the gas washer for the kiln (Permit Condition 21);*
- *the recommended minimum value that shall be maintained for the water flow rate to the slaker exit water spray (Permit Condition 39);*
- *the recommended minimum value that shall be maintained for the pressure drop across the gas washer for the kiln (Permit Condition 22);*
- *procedures for normal operating conditions, startup, shutdown, and maintenance;*
- *procedures for upset conditions and corrective actions to be taken;*
- *methods of preventing malfunctions; and*
- *provisions for annual inspections during planned maintenance outages.*

Process slaker control equipment and associated permit requirements (associated with the water spray) have been removed.

Additional relevant discussion is provided below concerning Permit Conditions 36 through 42 of P-2010.0043 PROJ 61012, and in the Emission Inventories and Ambient Air Quality Impacts section.

³ "Permit Condition #12, #13, and #14 for the Lime Kiln Replacement Project" notification including appended O&M manual for the Eberhardt Lime Kiln, Gas Washer, 1st and 2nd Carbonation Tanks, and Process Slaker, TASCO-Paul, November 8, 2012 (2012AAI2394).

Revised Permit Condition 3.2 (Permit Condition 18 of P-2010.0043 PROJ 61012)

Emissions from the first carbonation tank, the second carbonation tank, the compressor pressure relief vent, or any other stack, vent, or functionally equivalent opening associated with the kiln, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Although the process slaker control equipment and associated permit requirements have been removed, generally-applicable opacity requirements (Permit Conditions 2.7 – 2.9 and 3.2 remain applicable to the lime kiln system, including the process slaker exhaust stack. For clarification purposes, the process slaker was added to the list of sources specified in Permit Condition 3.2.

Additional relevant discussion is provided below concerning Permit Conditions 36 through 42 of P-2010.0043 PROJ 61012, and in the Emission Inventories and Ambient Air Quality Impacts section.

Removed Permit Conditions 25, 31, and 35 of P-2010.0043 PROJ 61012

Equipment Startup, Transition, and Shutdown

- *Within 60 days following initial startup of the Eberhardt lime kiln, the permittee shall permanently shutdown the Union Carbide and Belgian lime kiln systems and process slakers.*
- *During the initial startup of the Eberhardt lime kiln and simultaneous shutdown of the Union Carbide and Belgian lime kiln systems, the combined total emissions from the Eberhardt, Union Carbide and Belgian lime kiln systems and process slakers shall not exceed the emission limits and throughput limits specified for the Eberhardt lime kiln and process slaker (Permit Conditions 17, 23, 36, and 40). Simultaneous operation of the lime kilns shall only occur, if necessary, for a 5-day period. Monitoring, recordkeeping, and notification of startup, simultaneous operation, and permanent shutdown shall be provided as specified in the equipment startup, transition, and shutdown monitoring and notification requirements (Permit Conditions 31 and 35).*

Equipment Startup, Transition, and Shutdown Monitoring

For each calendar day during the 60 days following initial startup, the permittee shall monitor and record the date and time that each kiln (Eberhardt, Union Carbide, and Belgian) begins and ends operation to ensure compliance with the equipment startup, transition, and shutdown requirements (Permit Condition 25).

Equipment Startup, Transition, and Shutdown Notifications

- *At least seven days prior to the simultaneous operation of the Eberhardt and the Union Carbide and Belgian lime kiln system(s) (as provided in Permit Condition 25), the permittee shall provide written notification to DEQ at the address provided (Permit Condition 16) of the anticipated dates of simultaneous operation.*
- *The permittee shall provide notification of the actual date of initial startup of the Eberhardt lime kiln as required in the construction and operation notification general provision (Permit Condition 47).*
- *Within 15 days after completing permanent shutdown of the Union Carbide and Belgian lime kiln systems as required in the equipment shutdown permit condition (Permit Condition 25), the permittee shall provide written notification to DEQ at the address provided (Permit Condition 16) of the date of the permanent shutdown of the Union Carbide and Belgian lime kiln systems and the existing process slaking system.*
 - *The notification shall include a description of the method used to ensure permanent shutdown of the Union Carbide and Belgian lime kiln systems and the existing process slakers.*
 - *The notification shall include documentation necessary to demonstrate that during the 60-day period following initial startup of the Eberhardt lime kiln, the total emissions and total throughputs from the Eberhardt, Union Carbide and Belgian lime kiln systems and process slakers combined were equal to or less than the relevant emission limits and throughput limits specified for the Eberhardt lime kiln and process slaker (Permit Conditions 17, 23, 36, and 40). Documentation shall include the emission estimates, throughput rates, and fuel usage for the Eberhardt, Union Carbide and Belgian lime kiln systems and process slakers, a summary of the startup and shutdown times for each kiln (Permit Condition 31), and a certification of compliance with all applicable permit conditions.*

Within required timeframes, the permittee provided notification that simultaneous operation would not occur (as described above), and included a description of the methods used to ensure permanent shutdown of the Union Carbide and Belgian kilns and associated process slakers.⁴ Those requirements were considered satisfied or no longer applicable, and were removed.

Revised Permit Conditions 3.14 and 3.15 (Permit Conditions 32 and 33 of P-2010.0043 PROJ 61012)

Initial Performance Tests

- *Within 60 days after achieving the maximum production rate at which the kiln will be operated but not later than 180 days after initial startup of the kiln, performance testing shall be conducted on the kiln emission points to demonstrate compliance with the following emission limits, in accordance with IDAPA 58.01.01.211, IDAPA 58.01.01.157, and the performance testing general provisions (Permit Conditions 48 through 50):*
 - *The PM emission limits in pounds per hour (Permit Condition 19);*
 - *The PM₁₀ emission limits in pounds per hour (Permit Condition 17);*
 - *The CO emission limit in pounds per hour (Permit Condition 17);*
 - *The NO_x emission limit in pounds per hour (Permit Condition 17);*
 - *The visible emission limits in percent opacity (Permit Condition 9).*
- *Each performance test shall be conducted in accordance with the test methods requirement (Permit Condition 15), and under the following operating conditions, unless otherwise approved by DEQ, in accordance with IDAPA 58.01.01.211:*
 - *Visible emissions shall be measured at the first carbonation tank, second carbonation tank, and pressure relief vents.*
 - *PM, PM₁₀, CO, and NO_x emissions shall be measured at the first carbonation tank and the second carbonation tank.*
 - *The kiln shall be operated at maximum capacity (at least 80% of the maximum rated equipment throughput or greater) during the source test period unless otherwise approved by DEQ.*
 - *Parameters shall be monitored and recorded as specified in the performance test monitoring requirement (Permit Condition 34).*

Periodic Performance Tests

Performance tests to determine the CO, NO_x and visible emissions from the kiln stacks shall be conducted no less frequently than annually following the date of each required initial performance test and under the conditions required for the initial performance tests (Permit Condition 32), in accordance with IDAPA 58.01.01.211.

Because initial performance test results demonstrated compliance with emission limits,² and with consideration given to current DEQ policy,⁵ the frequency of required emissions testing for the lime kiln system has been reduced. A summary of recent performance testing results is provided in Table 4.

To account for emissions from pressure relief venting, a requirement was also added to require ducting of these emissions to the first carbonation tank to be measured during performance testing. This methodology was demonstrated during the most recent performance test completed on November 19-20, 2013.⁶

⁴ "Permit Conditions #25, #31, and #35 for the Lime Kiln Replacement Project" notification, TASC0-Paul, April 12, 2012 (2012AAII144).

⁵ Guidance for Requiring Source Tests in Air Permits, Doc ID AQ-IG-P001, rev. 1, Idaho DEQ, April 16, 2007 (2008AAF49).

⁶ As noted in the "Review of the Lime Kiln Carbonation System performance test conducted by TASC0, LLC at the Mini-Cassia facility, November 19-20, 2013," DEQ, January 28, 2014 (2014AAI257).

Table 4 Summary of Lime Kiln System Performance Test Results

Emissions Unit	Pollutant	Year Tested	Measured Emission Rate	Emission Limit
Kiln (carb tanks)	NO _x	2012	4.59 lb/hr	20.21 lb/hr
		2013	8.50 lb/hr	20.21 lb/hr
	CO	2012	393.3 lb/hr	689.8 lb/hr
		2013	108.7 lb/hr	689.8 lb/hr
	PM ₁₀ (1 st tank)	2012	0.9 lb/hr	2.42 lb/hr
	PM ₁₀ (2 nd tank)		0.1 lb/hr	0.46 lb/hr
	PM ₁₀ (combined)		0.96 lb/hr	2.88 lb/hr
	PM		0.80 lb/hr	14.87 lb/hr

Removed Permit Conditions 36 through 42 of P-2010.0043 PROJ 61012

Emission Limits

Emissions from the process slaker stack shall not exceed any emissions rate limit in the following table:

PROCESS SLAKER EMISSION LIMITS^a

Emission Points	PM ₁₀ ^c
	lb/hr ^d
Process slaker (S-K2)	0.46 ^b

- a) *In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and record keeping requirements.*
- b) *Total emissions from the process slaker.*
- c) *Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.81.*
- d) *Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference method, or DEQ-approved alternative.*

Opacity Limit

The emissions from any stack, vent, or functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Process Weight Limitations

The permittee shall not emit PM to the atmosphere from any process or process equipment in excess of the amount shown by the equations in IDAPA 58.01.01.700-703, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

- The process slaker is process or process equipment as defined in IDAPA 58.01.01.006.

- If PW is less than 9,250 lb/hr,

$$E = 0.045(PW)^{0.60}$$

- If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

Water Spray Flow Rate

The permittee shall install, operate, calibrate, and maintain a monitoring device to continuously measure the water flow rate to the water spray at the slaker exit. The permittee shall maintain the water flow rate to the water spray at greater than or equal to the value specified in the O&M manual (Permit Condition 13).

Throughput

Throughput to the process slaker shall be based on the daily average CaO value specified in the 3-page daily report generated by the facility. Raw data and calculations supporting the daily reported CaO value shall be made available to DEQ upon request.

- The throughput to the process slaker shall not exceed 394 tons per day, based on a five-day rolling average.
- The throughput to the process slaker shall not exceed 74,860 tons per any consecutive 12 calendar month period.

Water Spray Flow Rate

When the process slaker is operated, the permittee shall continuously monitor and record on a weekly basis the water flow rate to the slaker exit to ensure compliance with the flow rate specified in the O&M manual (Permit Condition 13).

Throughput

- When the process slaker is operated, the permittee shall monitor continuously and record on a daily basis the daily average CaO throughput to the process slaker in tons per calendar day and the CaO throughput in tons per rolling 5-day average to demonstrate compliance with the process slaker daily throughput limit (Permit Condition 40). The 5-day rolling average CaO throughput to the process slaker shall be calculated each calendar day as the arithmetic average of the daily average CaO throughput to the process slaker measured for the given calendar day and the four calendar days immediately preceding that day.
- The permittee shall record on a monthly basis the throughput to the process slaker in tons per calendar month and in tons per consecutive 12 calendar month period to demonstrate compliance with the process slaker annual throughput limit (Permit Condition 40). The 12 calendar month rolling average CaO throughput to the process slaker shall be calculated each calendar month as the arithmetic average of the CaO throughput to the process slaker measured for the given calendar month and the eleven calendar months immediately preceding that month.

Because the permittee has completed initial performance testing on the process slaker (without the use of add-on control equipment) which demonstrated compliance with the PM₁₀, opacity, and process-weight PM emission limits,² these limits were no longer considered necessary and were removed. Ongoing compliance with generally-applicable opacity requirements as described above concerning revised Permit Condition 3.2 is still required.

In addition to performance test results supporting that add-on control equipment is not necessary for controlling emissions from the process slaker, the permittee has also documented the following in support of removing process slaker control equipment and associated permit requirements:⁷

- The process slaker is dedicated to the Eberhardt lime kiln by design; supplemental pebble lime cannot be added and will not be needed for plant operation. (Pebble lime was historically purchased for supplemental use in the Union Carbide and Belgian kiln slaking processes, which have since been replaced by the Eberhardt kiln system).
- Operation of add-on control equipment may exacerbate potential nuisance and/or safety hazard concerns.

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 nor provided in accordance with IDAPA 58.01.01.209.04.

⁷ As referenced from the "Application to Remove Process Lime Slaker from Permit," TASCO-Paul, February 3, 2014 (2014AAG301).