

## **Statement of Basis**

**Permit to Construct No. P-2013.0039  
Project ID 61222**

**Lewis-Clark Terminal  
Lewiston, Idaho**

**Facility ID 069-00010**

**Final Permit**

*CZ*

**August 23, 2013  
Carole Zundel  
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.

<b>ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE .....</b>	<b>3</b>
<b>FACILITY INFORMATION .....</b>	<b>4</b>
Description .....	4
Permitting History .....	4
Application Scope .....	4
Application Chronology .....	4
<b>TECHNICAL ANALYSIS .....</b>	<b>5</b>
Emissions Units and Control Equipment .....	5
Emissions Inventories.....	5
Ambient Air Quality Impact Analyses .....	6
<b>REGULATORY ANALYSIS.....</b>	<b>6</b>
Attainment Designation (40 CFR 81.313).....	6
Facility Classification .....	6
Permit to Construct (IDAPA 58.01.01.201).....	6
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).....	7
NSPS Applicability (40 CFR 60) .....	7
NESHAP Applicability (40 CFR 61) .....	8
MACT Applicability (40 CFR 63) .....	8
Permit Conditions Review.....	8
<b>PUBLIC REVIEW .....</b>	<b>12</b>
Public Comment Opportunity.....	12
<b>APPENDIX A – EMISSIONS INVENTORIES</b>	
<b>APPENDIX B – PROCESSING FEE</b>	

## ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

CFR	Code of Federal Regulations
DEQ	Department of Environmental Quality
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
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
O <sub>2</sub>	oxygen
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>
SO <sub>2</sub>	sulfur dioxide
T/day	tons per calendar day
T/yr	tons per consecutive 12 calendar month period
TAP	toxic air pollutants
VOC	volatile organic compounds

## **FACILITY INFORMATION**

### **Description**

Lewis-Clark Terminal is a country grain elevator, and provides handling and interim storage for regional grain supplies destined for international export or interstate transportation. Process operations include unloading grain from trucks or railcars, grain transfers and storage to elevator(s), grain loading into barges on the Clearwater River, and loading of baghouse hopper dust into trucks for offsite shipment.

### **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).

February 2, 2007	P-060200, Replace Tier II operating permit with permit to construct and include the use of food grain oil dust suppressant, Permit status or (A, but will become S upon issuance of this permit)
September 22, 2004 (Revised May 18, 2012)	P-2012.0027 (previously P-040205), May 18, 2012 revision changed ownership from CLD Pacific Grain, LLC to Lewis-Clark Terminal, Inc.
September 22, 2004	P-040205, Change facility contact and responsible official on CLD Pacific Grain, LLC permit
May 28, 2002	P-069-00011, Name change to CLD Pacific Grain, LLC, Permit status (S)
January 17, 2001	069-00011, Amend visible emission requirements of Cargill, Incorporated, North American Grain Division permit, Permit status (S)
December 8, 1999	069-00011, Name change from Continental Grain Company to Cargill, Incorporated, North American Grain Division
September 23, 1994	069-00011, Minor corrections to Continental Grain Company permit
September 6, 1994	069-00011, Change to Continental Grain Company permit
February 25, 1985	1140-0011, Grain terminal and pea/lentil processing to Continental Grain Company
May 23, 1984	1140-0010, Letter issuing June 29, 1984 permit that was later stamped "Cancel", Permit status (S)
June 29, 1979	13-1140-0011, Initial permit issued to Coast Trading Company, Inc., later Continental Grain Company
June 29, 1979	13-1140-0010-01 and 02, Truck dump. Barge loading, baghouse, plant roads

### **Application Scope**

This PTC is for a minor modification at an existing minor facility.

The applicant has proposed to:

- Combine the facility's two PTC's (P-2012.0027 and P-060200)
- Increase the grain throughput

### **Application Chronology**

January 22, 2013	DEQ sent a notice of violation to the facility (Enforcement Case No. E-2012.0023).
June 10, 2013	DEQ received an application.

June 11, 2013	DEQ received an application fee.
June 18 – July 3, 2013	DEQ provided an opportunity for public comment on the application and proposed permitting action.
July 3, 2013	DEQ determined that the application was complete.
July 12, 2013	DEQ made available the draft permit and statement of basis for peer and regional office review.
July 16, 2013	DEQ made available the draft permit and statement of basis for applicant review.
August 16, 2013	DEQ received the permit processing fee.

**TECHNICAL ANALYSIS**

***Emissions Units and Control Equipment***

**Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION**

<b>Sources</b>	<b>Control Equipment</b>
North truck unloading Max Capacity: 150,000 TPY (this includes additional 15,000 TPY) Max Operating Hrs: 3774	Baghouse 99.8% PM <sub>10</sub> control efficiency Oil spray 70% control efficiency
South truck unloading Max Capacity: 375,000 TPY Max Operating Hrs: 3774	Baghouse 99.8% PM <sub>10</sub> control efficiency Oil spray 70% control efficiency
East barge loading	Baghouse 99.8% control efficiency Oil spray 70% control efficiency
West truck unloading Max Capacity: 225,000 TPY (This includes additional 1,000 TPY) Max Operating Hrs: 3774	Baghouse 99.8% PM <sub>10</sub> control efficiency
West barge loading	Oil spray 70% control efficiency
Storage silos (bins) – North and South Truck Dumps	Oil spray 70% control efficiency
Storage silos (bins) – West Truck Dump	Oil spray 70% control efficiency

***Emissions Inventories***

Based on March 29, 1990 and July 11, 1991 inspection reports, the facility has operated at a throughput of up to 8 million bushels per year (224,000 tons per year). This is considered the foundation for the proposed modification.

Particulates were the only emissions identified in the application and in AP-42.

**Potential to Emit**

The increase in emissions was calculated in the application using the tons per year increase in throughput, the emission factor from AP-42, a control factor of 95% for baghouse control and 70% for oil control on the north and south truck dumps and east barge loading, and a control factor of 70% for oil spray on the West barge loading and storage silos.

In the application, the storage bins (also called “silos”) identified oil suppression on the north and south truck dumps, and no control on the west truck dump, but the emission calculations were made on all silos assuming 70% control, and baghouse control on the west truck dump. 70% control is consistent with oil control. The facility later informed the Lewiston Regional Office that no oil control was used at the truck dumps or at the silos, so uncontrolled values were used in the SOB to estimate emissions from the silos.

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 2 POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS**

Source	PM <sub>10</sub> T/yr	PM <sub>2.5</sub> T/yr
North Truck Unloading	0.0023	0.00028
South Truck Unloading	No change	No change
East Barge Loading	0.00045	0.000062
West Truck Unloading	0.000021	0.000043
West Barge Loading	0.00060	0.000083
Storage Silos – North and South Truck Dumps	0.047	0.0083
Storage Silos – West Truck Dump	0.0032	0.00055
<b>Changes in Potential to Emit</b>	<b>0.054</b>	<b>0.009</b>

**Ambient Air Quality Impact Analyses**

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. The applicant has also demonstrated pre-construction compliance to DEQ’s satisfaction that the emissions increase due to this permitting action will not exceed any acceptable ambient concentration (AAC) or acceptable ambient concentration for carcinogens (AACC) for toxic air pollutants (TAP).

**REGULATORY ANALYSIS**

**Attainment Designation (40 CFR 81.313)**

The facility is located in Nez Perce 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**

“Synthetic Minor” classification for criteria pollutants is defined as the uncontrolled Potential to Emit for criteria pollutants are above the applicable major source thresholds and this facility’s Potential to Emit for criteria pollutants falls below the applicable major source thresholds.

The facility has an uncontrolled potential to emit for PM<sub>10</sub> and PM<sub>2.5</sub> emissions less than the Major Source thresholds of 100 T/yr for each pollutant. In addition, the facility has uncontrolled potential HAP emissions of less than the Major Source threshold of 10 T/yr and for all HAP combined less than the Major Source threshold of 25 T/yr. Therefore, this facility is not designated as a Synthetic Minor facility.

**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 increase in emissions. 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 (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)**

Because the facility has grain elevators, 40 CFR 60, Subpart DD, Standards of Performance for Grain Elevators might apply.

**40 CFR 60, Subpart DD.....Standards of Performance for Grain Elevators**

*§ 60.300 Applicability and designation of affected facility.*

*(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under § 60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.*

*(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part.*

The facility was constructed prior to August 3, 1978.

The definition of modification is consulted to determine if a modification was made:

*§ 60.14 Modification.*

*(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.*

(break in section)

*(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.*

(break in section)

*(e) The following shall not, by themselves, be considered modifications under this part:*

*(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and § 60.15.*

*(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.*

*(3) An increase in the hours of operation.*

*(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.*

*(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.*

*(6) The relocation or change in ownership of an existing facility.*

The facility changed ownership on a previous permit action. This change in ownership did not cause the subpart to be applicable to this facility.

There is currently a request to increase production. There is no capital expenditure to accomplish this. Therefore, this does not cause the subpart to be applicable to the facility.

### **NESHAP Applicability (40 CFR 61)**

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

### **MACT 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.

Existing Permit Condition .

*Particulate matter (PM) emissions from the baghouse stack shall not exceed 0.20 grains per dry standard cubic foot (gr/dscf) per IDAPA 58.01.01.710.08.a.*

This permit condition was replaced by a throughput limit because the current emissions estimates were based on throughput rather than grain loading and air flow rates.

Existing Permit Condition

Particulate matter emissions with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10) from the Delta 107 grain-cleaner baghouse stack shall not exceed any corresponding emission rate limit listed in Table 2.2.

Table 2.2 Emission Limits<sup>a</sup> – Hourly (lb/hr) and Annual<sup>b</sup> (T/yr)

Source Description	PM		PM <sub>10</sub>	
	lb/hr	T/yr	lb/hr	T/yr
Delta 107 grain cleaner	0.025	0.078	0.025	0.078

<sup>a</sup> As determined by a pollutant-specific U.S. EPA reference method, or DEQ-approved alternative, or as determined by DEQ's emission estimation methods used in this permit analysis.

<sup>b</sup> 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.

lb/hr = pounds per hour

This permit condition was removed because the grain cleaning operation is no longer a part of this facility.

Existing Permit Condition

*Baghouse Monitoring Equipment*

*The permittee shall, in accordance with manufacturer specifications, install, calibrate, maintain, and operate equipment to continuously measure the pressure differential across the grain elevator baghouses.*

This permit condition was removed and replaced by the Baghouse/Filter System Procedures document requirement.

Existing Permit Condition

*Within 60 days of the issuance of this permit, the permittee shall develop an annual operating and maintenance schedule for the baghouse to assure DEQ that this air pollution control equipment will be operated optimally. This schedule shall be kept onsite and shall be made available to DEQ representatives upon request.*

This permit condition was removed because this condition is being replaced with the Baghouse/filter System procedures document requirement.

Existing Permit Condition

*Material Throughput*

*The process rate of material through the cleaner shall not exceed 41,600 tons per year (T/yr).*

*The process rate of material through the cleaner shall not exceed 480 tons per day (T/day).*

This permit condition was removed because it applied to the grain cleaning part of the process which is no longer used by the facility.

Revised Permit Condition

*Baghouse Operation*

*Grain shall not be transferred at the North End or South End truck dumps, or transferred to the barge shipping conveyor unless the associated baghouse is in operation.*

Revised to include applicability to the west portion of the grain elevator operations:

*Baghouse Operation*

Particulate emissions from the West, North, and South truck dumps, and the East barge shipping conveyor shall each be controlled by a baghouse as listed in the Country Grain Elevator table in this permit.

#### Existing Permit Condition

*The total throughput shall not exceed a maximum of 510,000 tons of grain in any consecutive 12-month period.*

#### Revised Permit Condition

*The total throughput from the North truck dump shall not exceed a maximum of 150,000 tons of grain in any consecutive 12-month period.*

*The total throughput from the South truck dump shall not exceed a maximum of 375,000 tons of grain in any consecutive 12-month period.*

*The total throughput from the West truck dump shall not exceed a maximum of 225,000 tons of grain in any consecutive 12-month period.*

*The total throughput from the East Barge Loading shall not exceed a maximum of 525,000 tons of grain in any consecutive 12-month period.*

*The total throughput from the West Barge Loading shall not exceed a maximum of 225,000 tons of grain in any consecutive 12-month period.*

This combines the two permits and is specific about throughput limits.

#### Removed Permit Conditions

##### *Throughput*

*The permittee shall monitor the number of tons processed per calendar year and the number of tons processed per day when operating. This data shall be compiled in a monthly report. The permittee shall maintain these records onsite for the most recent two years and copies shall be made available to DEQ representatives upon request.*

##### *Baghouse Pressure Drop*

*The pressure drop across the baghouse shall be recorded at least once during each day while the baghouse is operating, and the pressure drop shall be compiled in a monthly report which includes a record of the hours of operation and the time the measurement is performed. A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request.*

*These permit conditions were removed because they applied to the grain cleaning operation which is not part of this permit action.*

#### Revised Permit Condition

##### *Food-Grade Oil Dust Suppressant*

*The permittee shall apply food-grade oil to the grain at both barge loadout shipping conveyors to control particulate emissions.*

The food-grade oil dust suppressant permit condition was reworded to incorporate the information in the application for this permit.

#### New Permit Condition

##### *Oil Throughput Monitoring*

*The permittee shall monitor and record monthly the amount of food-grade oil applied to the grain for particulate control at both barge loadout shipping conveyors.*

This is required to assess compliance with the requirement to use oil to control the particulate emissions.

#### New Permit Condition

All of the pressure drop requirements in the old permits have been replaced by the Baghouse/Filter System Procedures document requirement.

## *Baghouse/Filter System Procedures*

*Within 60 days of initial start-up, the permittee shall have developed a Baghouse/Filter System Procedures document for the inspection and operation of the baghouses/filter system which controls emissions from the West, North, and South truck dumps and the East barge shipping conveyor. The Baghouse/Filter System Procedures document shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.*

*The Baghouse/Filter System Procedures document shall describe the procedures that will be followed to comply with General Provision 2 and shall contain requirements for monthly see-no-see visible emissions inspections of the baghouses. The inspection shall occur during daylight hours and under normal operating conditions.*

*The Baghouse/Filter System Procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouse at any time. At a minimum the document shall include:*

- *Procedures to determine if bags or cartridges are ruptured; and*
- *Procedures to determine if bags or cartridges are not appropriately secured in place.*

*The Permittee shall maintain records of the results of each baghouse/filter system inspections in accordance with General Provision 7. The records shall include , but not be limited to, the following:*

- *Date and time of inspection;*
- *Equipment inspected (e.g. exterior housing of baghouse, fan motor, auger, inlet air ducting);*
- *Description of whether visible emissions were present, and if visible emissions were present a description of the corrective action that was taken.*
- *Date corrective action was taken.*

*The Baghouse/Filter System Procedures document shall remain on site at all times and shall be made available to DEQ representatives upon request.*

*The operating, monitoring and recordkeeping requirements specified in the Baghouse/Filter System Procedures document are incorporated by reference to this permit and are enforceable permit conditions.*

### **Removed Permit Conditions**

**These are the permit conditions regarding baghouse pressure drop (mainly) that have been replaced by the Baghouse/Filter System Procedures document requirement.**

*A device to measure the pressure drop across the baghouse shall be installed within 60 days of the issuance of this permit. The pressure drop across the baghouse shall be operated and maintained within the manufacturer and Operation and Maintenance (O&M) Manual specifications. Documentation of the operating pressure drop specifications for the baghouse shall remain onsite at all times and shall be made available to DEQ representatives upon request.*

*The permittee shall, in accordance with manufacturer specifications, calibrate, maintain, and operate equipment to continuously measure the pressure differential across the grain elevator baghouses.*

*The pressure drop across the baghouse shall be maintained within manufacturer and operations and maintenance (O&M) Manual specifications.*

*The pressure drop across the baghouse shall be recorded at least once during each day while the baghouse is operating, and the pressure drop shall be compiled in a monthly report that includes a record of the hours of operation and the time the measurement is performed. A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request.*

*Within 60 days of permit issuance, the permittee shall have developed an O&M manual for the baghouses. The O&M manual shall describe the procedures that will be followed to comply with General Provision 2, the manufacturer specifications for the baghouses, and recommended practices for application of food-grade oil. The*

*manual shall contain, at a minimum, the pressure drop operating range for the baghouses, requirements for annual inspection and maintenance of the baghouses, and requirements for periodic inspections (i.e., monthly) during each month of operation. Inspections shall include but not be limited to checking the bags for structural integrity and that they are properly secured in place. The manual shall remain on site at all times and shall be made available to DEQ representatives upon request.*

*The permittee shall monitor and record the pressure drop across each baghouse once per week while operating to demonstrate compliance with Permit Conditions 2.6 and 2.7.*

Revised Permit Condition

*Throughput Monitoring*

*For any day and any month when grain is shipped or received, the permittee shall monitor and record the daily and monthly amount of grain received to demonstrate compliance with the throughput limits in this permit. Annual grain throughput shall be determined by summing each monthly total over the previous consecutive 12 months.*

**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. During this time, there were no comments on the application and 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

**PROPOSED CHANGE IN EMISSIONS**

Facility Name: Lewis Clark Terminal  
 Project: PTC Consolidation and Throughput Increase

Facility Information:

<b>Facility Throughput:</b>			
<b>Bushels</b>	151 bushels/hr 1,566 bushels/day (average) 371,429 bushels/year	<b>Estimated Hours of Oper. Mon</b>	3774 hrs/yr (no change) 10 hrs/day (203 days/yr, no change) 12 hrs/day (63 days/yr, no change) 10.3 hrs/day (average, no change)
<b>Trucks</b>	8,470 lbs/hr 87,671 lbs/day (average) 31,008,000 lbs/yr		<b>Conversion Factor</b> 1 bushel = 56 lbs
<b>Tons</b>	4 tons/hr 34 tons/day (average) 16,000 tons/yr (total) throughput increase, for a combined total throughput of 750,000 tons/yr <sup>13</sup>		

Existing Factors

Source	PM <sub>10</sub> (lb/ton of grain)	PM <sub>2.5</sub> (lb/ton of grain)	Exhaustion Factor Reference
Barge	0.004	0.00035	AP-42, 5th
Truck	0.029	0.0049	Ed., Chrysler
Hopper Truck	0.0978	0.0013	9.9.1, Table
Freight Truck	0.039	0.010	9.9.1-1,
Storage Bin	0.0062	0.0011	March 2003

Receiving

North End Truck Drives

Control: Oil Suppression and Bargehouse

Throughput<sup>1</sup>

4 tons/hr  
41 tons/day  
135,000 tons/yr (Under permit # P-060200)  
15,000 tons/yr (Proposed increase)

	PM <sub>10</sub>				PM <sub>2.5</sub>			
	lb/hr	lb/day	lb/yr	ton/yr	lb/hr	lb/day	lb/yr	ton/yr
Straight Truck (25%)	3.9E-03	6.1E-01	2.2E+02	1.1E-01	9.9E-03	1.9E-01	3.9E+01	1.9E-02
Hopper Truck (75%)	2.3E-02	2.4E-01	8.8E+01	4.3E-02	3.9E-03	4.9E-02	1.9E+01	7.3E-03
Uncontrolled Total <sup>2</sup>	6.2E-02	8.5E-01	3.1E+02	1.5E-01	9.9E-03	1.9E-01	3.9E+01	1.9E-02
Controlled Total <sup>3</sup>	1.2E-03	1.3E-02	4.6E+00	2.3E-03	1.3E-04	1.3E-03	3.9E-01	2.9E-04

Calculate Grain Loading:

0.0008 lb/hr (maximum emissions, assuming 99.9% control efficiency)  
 16,000 ton (per Statement of Basis for PTC No. P-060200); assume chn = draft  
 0.1 g/dec (calculated)

South End Truck Drives

Control: Oil Suppression and Bargehouse

Throughput<sup>1</sup>

No change tons/hr  
No change tons/day (average)  
375,000 tons/yr (Under permit # P-060200)  
0 tons/yr (Proposed increase)

	PM <sub>10</sub>				PM <sub>2.5</sub>			
	lb/hr	lb/day	lb/yr	ton/yr	lb/hr	lb/day	lb/yr	ton/yr
Straight Truck (25%)	No change	No change	No change	No change	No change	No change	No change	No change
Hopper Truck (75%)	No change	No change	No change	No change	No change	No change	No change	No change
Uncontrolled Total <sup>2</sup>	0	0	0	0	0	0	0	0
Controlled Total <sup>3</sup>	0	0	0	0	0	0	0	0

Calculate Grain Loading:

0.002 lb/hr (maximum emissions, assuming 99.9% control efficiency)  
 20,000 ton (per Statement of Basis for PTC No. P-060200); assume chn = draft  
 0.2 g/dec (calculated)

East End Drives

Control: Bargehouse

Throughput<sup>2</sup>

0.26 tons/hr  
2.7 tons/day  
234,000 tons/yr (Under permit # P-2012.0827)  
1,800 tons/yr (Proposed increase)

	PM <sub>10</sub>				PM <sub>2.5</sub>			
	lb/hr	lb/day	lb/yr	ton/yr	lb/hr	lb/day	lb/yr	ton/yr
Straight Truck (25%)	3.9E-03	4.0E-02	1.5E+01	7.4E-03	6.6E-04	7.8E-03	2.6E+00	1.3E-02
Hopper Truck (75%)	1.8E-03	1.6E-02	5.9E+00	2.9E-03	2.6E-04	2.7E-03	9.8E-01	4.9E-04
Uncontrolled Total <sup>2</sup>	5.9E-03	5.6E-02	2.1E+01	1.0E-02	6.6E-04	6.6E-03	2.6E+00	1.3E-02
Controlled Total <sup>3</sup>	1.1E-05	1.1E-04	4.1E-02	2.1E-05	2.3E-05	2.3E-04	8.5E-02	4.2E-05

Calculate Grain Loading:

99.9% PM Control efficiency (per permit conditions)  
 8 g/dec of total loading  
 0.1 g/dec

Shipping

East End Drives

Control: Oil suppression & bargehouse on bin houses

Throughput<sup>1</sup>

4 tons/hr  
41 tons/day  
15,000 tons/yr

	PM <sub>10</sub>				PM <sub>2.5</sub>			
	lb/hr	lb/day	lb/yr	ton/yr	lb/hr	lb/day	lb/yr	ton/yr
Barge (100%)	1.6E-02	1.6E-01	6.9E+01	3.9E-02	2.2E-03	2.3E-02	8.3E+00	4.1E-03
Uncontrolled Total <sup>2</sup>	1.6E-02	1.6E-01	6.9E+01	3.9E-02	2.2E-03	2.3E-02	8.3E+00	4.1E-03
Controlled Total <sup>3</sup>	2.4E-04	2.5E-03	9.0E-01	4.5E-04	3.3E-05	3.4E-04	1.2E-01	6.2E-05

**East Canyon CLOD Storage Terminal**  
Control: Oil suppression

Throughput: 0.26 tons/hr  
2.7 tons/day  
1,000 tons/yr (Proposed Increase)

	PM <sub>10</sub>				PM <sub>2.5</sub>			
	lb/hr	lb/day	lb/yr	ton/yr	lb/hr	lb/day	lb/yr	ton/yr
Range (1995)	1.1E-03	1.1E-02	4.0E+00	2.0E-03	1.4E-04	1.3E-03	5.3E-01	2.8E-01
Uncontrolled Total	1.1E-03	1.1E-02	4.0E+00	2.0E-03	1.2E-04	1.5E-03	5.3E-01	3.7E-01
Controlled Total <sup>1</sup>	3.2E-04	3.7E-03	1.3E+00	6.0E-04	4.4E-05	4.3E-04	1.7E-01	8.3E-02

Storage

**Storage Bin - For North & South Truck Drump**  
Control: Oil suppression

Storage Bin: 24 bins/day  
Hours of Operation: 7 days/week  
52 weeks/year

Throughput: 4 tons/hr  
41 tons/day  
15,000 tons/yr

	PM <sub>10</sub>				PM <sub>2.5</sub>			
	lb/hr	lb/day	lb/yr	ton/yr	lb/hr	lb/day	lb/yr	ton/yr
Storage Bin	2.5E-02	2.6E-01	9.5E+01	4.7E-02	4.4E-03	4.9E-02	1.7E+01	8.3E-01
Uncontrolled Total	2.5E-02	2.6E-01	9.5E+01	4.7E-02	4.4E-03	4.9E-02	1.7E+01	8.3E-01
Controlled Total <sup>1</sup>	7.5E-03	7.8E-02	2.8E+01	1.4E-02	1.3E-03	1.4E-02	5.0E+00	2.5E-01

**Storage Bin - For West Truck Drump**  
Control: None

Storage Bin: 24 hrs/day  
Hours of Operation: 7 days/week  
52 weeks/year

Throughput: 0.26 tons/hr  
2.7 tons/day  
1,000 tons/yr

	PM <sub>10</sub>				PM <sub>2.5</sub>			
	lb/hr	lb/day	lb/yr	ton/yr	lb/hr	lb/day	lb/yr	ton/yr
Storage Bin	1.7E-03	1.7E-02	6.3E+00	3.2E-03	2.9E-04	3.0E-03	1.1E+00	5.3E-01
Uncontrolled Total	1.7E-03	1.7E-02	6.3E+00	3.2E-03	2.9E-04	3.0E-03	1.1E+00	5.3E-01
Controlled Total	5.0E-04	5.2E-03	1.9E+00	9.5E-04	8.7E-05	9.0E-04	3.3E-01	1.7E-01

**Temporary Outdoor Storage Pile**

Fugitive emissions due to temporary outdoor storage are already permitted under PTC No. 2012.0027

References Summary

	Current Permitted Emissions			Proposed Change in Emissions				Total Emissions			
	Receiving	Bin	Shipping	Receiving	Bin	Shipping	Total	Receiving	Storage Bin	Shipping	Total
PM <sub>10</sub> (lb/hr)	4.4E-02	3.7E-01	8.9E-02	1.2E-03	8.0E-03	5.6E-04	9.8E-03	4.9E-02	3.8E-01	6.0E-02	5.0E-01
PM <sub>10</sub> (lb/day)	4.6E-01	3.8E+00	8.3E-01	1.3E-02	8.3E-02	5.8E-03	1.0E-01	4.7E-01	3.9E+00	6.3E-01	5.2E+00
PM <sub>10</sub> (lb/yr)	1.1E+02	1.4E+03	3.0E+02	4.7E+00	3.0E+01	2.1E+00	3.7E+01	1.2E+02	1.6E+03	3.0E+02	1.9E+03
PM <sub>2.5</sub> (lb/hr)	5.7E-02	6.9E-01	1.9E-01	2.3E-03	1.5E-02	1.1E-03	1.9E-02	5.9E-02	7.1E-01	1.9E-01	9.2E-01
PM <sub>2.5</sub> (lb/day)	5.4E-01	6.4E-02	1.1E-02	1.7E-04	1.4E-03	7.7E-04	1.6E-03	5.9E-03	6.6E-02	1.1E-02	6.3E-02
PM <sub>2.5</sub> (lb/yr)	1.5E-02	6.7E-01	1.1E-01	1.8E-03	1.4E-02	7.9E-04	1.7E-02	5.7E-02	6.8E-01	1.1E-01	8.5E-01
PM <sub>2.5</sub> (ton/yr)	2.0E+01	2.5E+02	4.1E+01	6.9E-01	1.3E+00	2.9E-01	6.2E+00	2.1E+01	2.5E+02	4.2E+01	3.1E+02
PM <sub>2.5</sub> (ton/yr)	1.0E-02	1.2E-01	2.1E-02	3.2E-04	2.6E-03	1.4E-04	3.1E-03	1.0E-02	1.2E-01	2.1E-02	1.6E-01

Note:

<sup>1</sup> The total facility throughput of 750,000 tons/year is to be distributed as follows: 20% through the North Truck Drump, 70% through the West Truck Drump, and 50% through the South Truck Drump. The increased throughput for each pile due to the proposed facility throughput increase is addressed on a tonnage basis.

<sup>2</sup> PTC No. P-2012.0027 and its Statement of Basis do not provide a production limit. Based on a public outside request submitted to IDEQ on 4/1/2013, the original application cannot be found. Based on March 29, 1990 and July 11, 1991 inspection reports, the facility has operated at a throughput of up to 8 million bushels/year (224,000 tons/year); this is considered the foundation for the proposed modification.

<sup>3</sup> Per PTC No. P-050200, railcar deliveries are lower in emission rates, so the emissions would not increase if deliveries are by rail rather than by truck; therefore assumed 100% truck deliveries.

<sup>4</sup> Per PTC No. P-060200, Emissions are controlled by 70% efficient food grade oil drum suppressors and 93% efficient Kier baghouses. The Kier baghouse design efficiency is 99.9% but applied used only 93% in the application. 93% control efficiency is at this application for consistency with prior permitting actions.

<sup>5</sup> The Kier baghouse design efficiency is 99.9% for Total PM, and 99.8% for PM10 per manufacturer's specifications.

<sup>6</sup> Solutions are controlled by 70% efficient food grade oil suppressors.

Modeling Threshold Comparison

Pollutant	Modeling Threshold <sup>1</sup> (lb/yr)	Modeling Threshold (TFY)	Proposed Emissions Change (lb/yr)	Proposed Emissions Change (ton/yr)	Modeling Result <sup>2</sup>
PM <sub>10</sub>	0.224	-	0.070	0.019	No
PM <sub>2.5</sub>	0.024	0.15	0.0016	0.0031	No

<sup>1</sup> Modeling Thresholds from Table 2 of "State of Idaho Guidelines for Performing Air Quality Impact Assessment"

## APPENDIX B – PROCESSING FEE

## PTC Fee Calculation

**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:** Lewis-Clark Terminal  
**Address:** 1534 3rd Avenue North  
**City:** Lewiston  
**State:** ID  
**Zip Code:** 83501  
**Facility Contact:** Arvid Lyons  
**Title:** Facility Manager  
**AIRS No.:** 069-00010

- 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 <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
TAPS/HAPS	0.0	0	0.0
<b>Total:</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>
<b>Fee Due</b>	<b>\$ 1,000.00</b>		

Comments:

