✓#19608
$1,000.00 TS

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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A.Q. PROGRAM

**DEQ AIR QUALITY PROGRAM**
1410 N. Hilton, Boise, ID 83706
For assistance, call the
**Air Permit Hotline – 1-877-5PERMIT**

Cover Sheet for Air Permit Application – Permit to Construct **Form CSPTC**

*Please see instructions on page 2 before filling out the form.*

| COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER | | | |
|---|---|---|---|
| 1. Company Name | Lewis-Clark Terminal, Inc. | | |
| 2. Facility Name | Lewis-Clark Terminal, Inc. | 3. Facility ID No. | 069-00010 and 069-00011 |
| 4. Brief Project Description - One sentence or less | Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 tons/year. | | |

**PERMIT APPLICATION TYPE**

5. ☐ New Source ☐ New Source at Existing Facility ☐ PTC for a Tier I Source Processed Pursuant to IDAPA 58.01.01.209.05.c
☐ Unpermitted Existing Source ☐ Facility Emissions Cap ☒ Modify Existing Source: Permit No.: P-060200 and P-2012.0027
Date Issued: 02/02/2007 and 05/18/2012 ☒ Required by Enforcement Action: Case No.:E-2012.0021 and E-2012.0023

6. ☒ Minor PTC ☐ Major PTC

**FORMS INCLUDED**

| Included | N/A | Forms | | DEQ Verify |
|---|---|---|---|---|
| ☒ | ☐ | Form CSPTC – Cover Sheet | | ☐ |
| ☒ | ☐ | Form GI – Facility Information | | ☐ |
| ☒ | ☐ | Form EU0 – Emissions Units General | | ☐ |
| ☐ | ☒ | Form EU1– Industrial Engine Information | Please specify number of EU1s attached: ____ | ☐ |
| ☐ | ☒ | Form EU2– Nonmetallic Mineral Processing Plants | Please specify number of EU2s attached: ____ | ☐ |
| ☐ | ☒ | Form EU3– Spray Paint Booth Information | Please specify number of EU3s attached: ____ | ☐ |
| ☐ | ☒ | Form EU4– Cooling Tower Information | Please specify number of EU3s attached: ____ | ☐ |
| ☐ | ☒ | Form EU5 – Boiler Information | Please specify number of EU4s attached: ____ | ☐ |
| ☐ | ☒ | Form CBP– Concrete Batch Plant | Please specify number of CBPs attached: ____ | ☐ |
| ☐ | ☒ | Form HMAP – Hot Mix Asphalt Plant | Please specify number of HMAPs attached: ____ | ☐ |
| ☐ | ☒ | PERF – Portable Equipment Relocation Form | | ☐ |
| ☐ | ☒ | Form AO – Afterburner/Oxidizer | | ☐ |
| ☐ | ☒ | Form CA – Carbon Adsorber | | ☐ |
| ☐ | ☒ | Form CYS – Cyclone Separator | | ☐ |
| ☐ | ☒ | Form ESP – Electrostatic Precipitator | | ☐ |
| ☒ | ☐ | Form BCE– Baghouses Control Equipment | | ☐ |
| ☐ | ☒ | Form SCE– Scrubbers Control Equipment | | ☐ |
| ☐ | ☒ | Form VSCE – Venturi Scrubber Control Equipment | | ☐ |
| ☐ | ☒ | Form CAM – Compliance Assurance Monitoring | | ☐ |
| ☒ | ☐ | Forms EI— Emissions Inventory | | ☐ |
| ☒ | ☐ | PP – Plot Plan | | ☐ |
| ☐ | ☒ | Forms MI1 – MI4 – Modeling | (Excel workbook, all 4 worksheets) | ☐ |
| ☒ | ☐ | Form FRA – Federal Regulation Applicability | | ☐ |

**DEQ AIR QUALITY PROGRAM**
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General Information **Form GI**
Revision 7
6/29/12

**Please see instructions on back page before filling out the form. All information is required. If information is missing, the application will not be processed.**

## Identification

**1. Facility name**: Lewis-Clark Terminal, Inc.

**2. Existing facility identification number**: 069-00010 and 069-00011

☐ **Check if new facility (not yet operating)**

**3. Brief project description**: Combine PTC's for both facilities into a single PTC, and increase allowable grain throughput

## Facility Information

**4. Primary facility permitting contact name**: Arvid Lyons

**Contact type**: Responsible official

**Telephone number**: (208) 746-9685

**E-mail**: arvidlyons@lctinc.biz

**5. Alternate facility permitting contact name**: Beth Fifield Hodgson

**Alternate contact type**: Facility permitting contact

**Telephone number**: (509) 328-7500

**E-mail**: beth@springenvironmental.com

**6. Mailing address where permit will be sent (street/city/county/state/zip code)**: 1534 3rd Avenue North, Lewiston, ID 83501

**7. Physical address of permitted facility (if different than mailing address) (street/ city/county/state/zip code)**:

**8. Is the equipment portable?** ☐ **Yes*** ☒ **No** ***If yes, complete and attach PERF; see instructions.**

**9. NAICS codes: Primary NAICS**: 424510

**Secondary NAICS**:

**10. Brief business description and principal product produced**: Storage, cleaning, and shipping of grain.

**11. Identify any adjacent or contiguous facility this company owns and/or operates**: Lewis-Clark Terminal and Lewis-Clark Terminal, Inc. are adjacent.

**12. Specify type of application**

☒ **Permit to construct (PTC); application fee of $1,000 required. See instructions.**

☐ **Tier I permit** ☐ **Tier II permit** ☐ **Tier II/Permit to construct**

**For Tier I permitted facilities only**: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit.

☐ **Co-process Tier I modification and PTC** ☐ **Incorporate PTC at the time of Tier I renewal** ☐ **Administratively amend the Tier I permit to incorporate the PTC upon applicant's request (IDAPA 58.01.01.209.05.a, b, or c)**

## Certification

In accordance with IDAPA 58.01.01.123 (Rules for the Control of Air Pollution in Idaho), I certify based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

**13. Responsible official's name**: Arvid Lyons

**Official's title**: Facility Manager

**Official's address**: 1534 3rd Avenue North, Lewiston, ID 83501

**Telephone number**: (208) 746-9685

**E-mail**: arvidlyons@lctinc.biz

**Official's signature**: Arvid Lyons

**Date**: 6-1-2013

☒ **14. Check here to indicate that you want to review the draft permit before final issuance.**

**DEQ AIR QUALITY PROGRAM**
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Emissions Unit - General **Form EU0**
Revision 4
08/28/08

*Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| 1. Company Name: | 2. Facility Name: | 3. Facility ID No: |
|---|---|---|
| Lewis-Clark Terminal, Inc. | Lewis-Clark Terminal, Inc. | 069-00010 & 069-00011 |

4. Brief Project Description: Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 TPY.

## EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

| | | |
|---|---|---|
| 5. | Emissions Unit (EU) Name: | NORTH END TRUCK DUMP & BARGE LOADING CONVEYOR |
| 6. | EU ID Number: | 01 |
| 7. | EU Type: | ☐ New Source ☐ Unpermitted Existing Source<br>☒ Modification to a Permitted Source – Previous Permit #:P-060200 Date Issued: 02/02/2007 |
| 8. | Manufacturer: | N/A |
| 9. | Model: | N/A |
| 10.. | Maximum Capacity: | 150,000 TPY |
| 11. | Date of Construction: | UNKNOWN |
| 12. | Date of Modification (if any): | N/A |
| 13. | Is this a Controlled Emission Unit? | ☐ No ☒ Yes If Yes, complete the following section. If No, go to line 22. |

## EMISSIONS CONTROL EQUIPMENT

| | |
|---|---|
| 14. Control Equipment Name and ID: | KICE 144-10 Baghouse , BH01 |
| 15. Date of Installation: | Unknown 16. Date of Modification (if any): |
| 17. Manufacturer and Model Number: | KICE 144-10 |
| 18. ID(s) of Emission Unit Controlled: | 01 |
| 19. Is operating schedule different than emission units(s) involved? | ☐ Yes ☒ No |
| 20. Does the manufacturer guarantee the control efficiency of the control equipment? | ☐ Yes ☒ No (If Yes, attach and label manufacturer guarantee) |

| | Pollutant Controlled | | | | | |
|---|---|---|---|---|---|---|
| | PM | PM10 | $SO_2$ | NOx | VOC | CO |
| Control Efficiency | >95 | >95 | | | | |

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

## EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

| | | |
|---|---|---|
| 22. | Actual Operation: | 3774 HR/YR |
| 23. | Maximum Operation: | 3774 HR/YR |

## REQUESTED LIMITS

| | | |
|---|---|---|
| 24. | Are you requesting any permit limits? | ☒ Yes ☐ No (If Yes, indicate all that apply below) |
| | ☐ Operation Hour Limit(s): | |
| | ☒ Production Limit(s): | 150,000 TPY |
| | ☐ Material Usage Limit(s): | |
| | ☐ Limits Based on Stack Testing: | Please attach all relevant stack testing summary reports |
| | ☐ Other: | |
| 25. | Rationale for Requesting the Limit(s): | THE FACILITY WILL ROUTE AN ADDITIONAL 15,000 TONS/YEAR THROUGH THIS TRUCK DUMP. |

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Emissions Unit - General **Form EU0**
Revision 4
08/28/08

*Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| 1. Company Name: | 2. Facility Name: | 3. Facility ID No: |
|---|---|---|
| Lewis-Clark Terminal, Inc. | Lewis-Clark Terminal, Inc. | 069-00010 & 069-00011 |

4. Brief Project Description: Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 TPY.

## EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

| | | |
|---|---|---|
| 5. | Emissions Unit (EU) Name: | SOUTH END TRUCK DUMP & BARGE LOADING CONVEYOR |
| 6. | EU ID Number: | 02 |
| 7. | EU Type: | ☐ New Source ☐ Unpermitted Existing Source<br>☒ Modification to a Permitted Source -- Previous Permit #:P-060200 Date Issued: 02/02/2007 |
| 8. | Manufacturer: | N/A |
| 9. | Model: | N/A |
| 10.. | Maximum Capacity: | 375,000 TPY (NO CHANGE) |
| 11. | Date of Construction: | UNKNOWN |
| 12. | Date of Modification (if any): | N/A |
| 13. | Is this a Controlled Emission Unit? | ☐ No ☒ Yes If Yes, complete the following section. If No, go to line 22. |

## EMISSIONS CONTROL EQUIPMENT

| | |
|---|---|
| 14. Control Equipment Name and ID: | KICE 144-10 Baghouse, BH02 |
| 15. Date of Installation: | Unknown 16. Date of Modification (if any): |
| 17. Manufacturer and Model Number: | KICE 144-10 |
| 18. ID(s) of Emission Unit Controlled: | South End Truck Dump, Barge Loading Conveyor |
| 19. Is operating schedule different than emission units(s) involved? | ☐ Yes ☒ No |
| 20. Does the manufacturer guarantee the control efficiency of the control equipment? | ☐ Yes ☒ No (If Yes, attach and label manufacturer guarantee) |

| | Pollutant Controlled | | | | | |
|---|---|---|---|---|---|---|
| | PM | PM10 | $SO_2$ | NOx | VOC | CO |
| Control Efficiency | >95 | >95 | | | | |

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

## EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

| | | |
|---|---|---|
| 22. | Actual Operation: | 3774 HR/YR |
| 23. | Maximum Operation: | 3774 HR/YR |

## REQUESTED LIMITS

| | | |
|---|---|---|
| 24. | Are you requesting any permit limits? | ☒ Yes ☐ No (If Yes, indicate all that apply below) |
| | ☐ Operation Hour Limit(s): | |
| | ☒ Production Limit(s): | 375,000 TPY (NO CHANGE) |
| | ☐ Material Usage Limit(s): | |
| | ☐ Limits Based on Stack Testing: | Please attach all relevant stack testing summary reports |
| | ☐ Other: | |
| 25. | Rationale for Requesting the Limit(s): | EXISTING PERMIT LIMITS |

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Emissions Unit - General **Form EU0**
Revision 4
08/28/08

*Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| 1. Company Name: | 2. Facility Name: | 3. Facility ID No: |
|---|---|---|
| Lewis-Clark Terminal, Inc. | Lewis-Clark Terminal, Inc. | 069-00010 and 069-00011 |

4. Brief Project Description: Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 TPY.

## EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

| | | |
|---|---|---|
| 5. | Emissions Unit (EU) Name: | WEST TRUCK DUMP, TUNNEL BELT, ELEVATOR LEG, BELT C |
| 6. | EU ID Number: | 03 |
| 7. | EU Type: | ☐ New Source ☐ Unpermitted Existing Source<br>☒ Modification to a Permitted Source -- Previous Permit #:P-2012.0027 Date Issued: 05/18/2012 |
| 8. | Manufacturer: | N/A |
| 9. | Model: | N/A |
| 10.. | Maximum Capacity: | 225,000 TPY |
| 11. | Date of Construction: | UNKNOWN |
| 12. | Date of Modification (if any): | N/A |
| 13. | Is this a Controlled Emission Unit? | ☐ No ☒ Yes If Yes, complete the following section. If No, go to line 22. |

## EMISSIONS CONTROL EQUIPMENT

| | |
|---|---|
| 14. Control Equipment Name and ID: | KICE 144-10 Baghouse, BH03 |
| 15. Date of Installation: | Unknown 16. Date of Modification (if any): |
| 17. Manufacturer and Model Number: | KICE 144-10 |
| 18. ID(s) of Emission Unit Controlled: | 03 (West Truck Dump, Tunnel Belt, Elevator Leg, Large Belt Conveyor Transfer Point) |
| 19. Is operating schedule different than emission units(s) involved? | ☐ Yes ☒ No |
| 20. Does the manufacturer guarantee the control efficiency of the control equipment? | ☐ Yes ☒ No (If Yes, attach and label manufacturer guarantee) |

| | Pollutant Controlled | | | | | |
|---|---|---|---|---|---|---|
| | PM | PM10 | $SO_2$ | NOx | VOC | CO |
| Control Efficiency | >95 | >95 | | | | |

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

## EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

| | | |
|---|---|---|
| 22. | Actual Operation: | 3774 HR/YR |
| 23. | Maximum Operation: | 3774 HR/YR |

## REQUESTED LIMITS

| | | |
|---|---|---|
| 24. | Are you requesting any permit limits? | ☒ Yes ☐ No (If Yes, indicate all that apply below) |
| | ☐ Operation Hour Limit(s): | |
| | ☒ Production Limit(s): | 225,000 TPY |
| | ☐ Material Usage Limit(s): | |
| | ☐ Limits Based on Stack Testing: | Please attach all relevant stack testing summary reports |
| | ☐ Other: | |
| 25. | Rationale for Requesting the Limit(s): | THE FACILITY WILL ROUTE AN ADDITIONAL 1,000 TONS/YEAR THROUGH THIS TRUCK DUMP. |

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Emissions Unit - General **Form EU0**
Revision 4
08/28/08

*Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| 1. Company Name: | 2. Facility Name: | 3. Facility ID No: |
|---|---|---|
| Lewis-Clark Terminal, Inc. | Lewis-Clark Terminal, Inc. | 069-00010 & 069-00011 |

4. Brief Project Description: Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 TPY.

## EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

| | | |
|---|---|---|
| 5. | Emissions Unit (EU) Name: | STORAGE SILOS |
| 6. | EU ID Number: | |
| 7. | EU Type: | ☐ New Source ☐ Unpermitted Existing Source ☒ Modification to a Permitted Source -- Previous Permit #:P-060200 & P-2012.0027 Date Issued: 02/02/2007 & 5/18/2012 |
| 8. | Manufacturer: | UNKNOWN |
| 9. | Model: | UNKNOWN |
| 10.. | Maximum Capacity: | 8 X 250,000 BUS BINS, 30 X 3,000-64,0000 BU BINS |
| 11. | Date of Construction: | UNKNOWN |
| 12. | Date of Modification (if any): | N/A |
| 13. | Is this a Controlled Emission Unit? | ☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22. |

## EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID: N/A

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

| | Pollutant Controlled | | | | | |
|---|---|---|---|---|---|---|
| | PM | PM10 | $SO_2$ | NOx | VOC | CO |
| Control Efficiency | | | | | | |

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

## EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

| | | |
|---|---|---|
| 22. | Actual Operation: | 8760 HR/YR |
| 23. | Maximum Operation: | 8760 HR/YR |

## REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

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Baghouse Control Equipment **Form BCE**
Revision 6
2/18/10

*Complete this form for each baghouse. Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| 1. Company Name | 2. Facility Name: |
|---|---|
| Lewis Clark-Terminal, Inc. | Lewis-Clark Terminal, Inc. |

3. Brief Project Description: Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 tons/year. There is no change to this existing permitted baghouse.

## BAGHOUSE INFORMATION

| 4. Baghouse Manufacturer: KICE | 5. Baghouse Model: 144-10 | 6. Baghouse Equipment ID: BH01 (North Truck Dump Baghouse) |
|---|---|---|

| | | |
|---|---|---|
| 7 (a). Baghouse particulate matter emission concentration. **Note: Provide information in 7(a)-(c) or answer question #8 below.** | 0.1 (no change from permit) gr/dscf | *Manufacturers typically provide guarantees in grains per dry standard cubic foot (gr/dscf). Provide a copy of the guarantee, or other documentation, with the application along with a description of the types of bags that must be used to achieve the emission concentration.* ***Emission concentrations less than 0.01 gr/dscf will receive additional scrutiny by DEQ and a source test of the baghouse may be required.*** *If a guarantee is not provided then you must document how you obtained the emission concentration. Without documentation the application is not complete.* |
| 7 (b). Percentage $PM_{10}$<br>Or Provide $PM_{10}$ Emission Concentration | 100 %<br>_____ gr/dscf | *What percentage of the PM concentration listed in question #7(a) is $PM_{10}$. You must provide documentation as to how the percentage was determined (i.e per the baghouse manufacturer). Without documentation the application is not complete.* |
| 7 (c). Baghouse flow rate | 16,000 (no change from permit) dscfm | *Provide the baghouse flow rate in dry standard cubic feet per minute. Actual cubic feet per minute may be given in lieu of dscfm* ***if it is documented*** *that moisture content is insignificant. You must provide documentation as to how this flow rate was determined (i.e. per the exhaust fan manufacturer, combustion evaluation, etc.). Without documentation the application is not complete.* |
| 8. Baghouse particulate matter control efficiency. **Note: Not needed if section #7 is completed.** | _____ % PM control<br>_____ % $PM_{10}$ control | *Applicant's providing the control efficiency of the baghouse must provide control efficiency for both PM and $PM_{10}$. Provide a copy of the control efficiency documentation with the application. Documentation must include a description of the types of bags that must be used to achieve the control efficiency. Without documentation the application is not complete.* |
| 9. Is the baghouse equipped with a bag leak detector? | ☐ Yes<br>☒ No | *If a bag leak detector is installed provide documentation on the leak detector, including; how the leak detector functions and what level of the output signal indicates that a bag is leaking. Without documentation the application is not complete.* |

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# Baghouse Control Equipment **Form BCE**

Revision 6
2/18/10

*Complete this form for each baghouse. Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| 1. Company Name | 2. Facility Name: |
|---|---|
| Lewis Clark-Terminal, Inc. | Lewis-Clark Terminal, Inc. |

3. Brief Project Description: Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 tons/year. There is no change to this existing permitted baghouse.

## BAGHOUSE INFORMATION

| 4. Baghouse Manufacturer: KICE | 5. Baghouse Model: 144-10 | 6. Baghouse Equipment ID: BH02 (South Truck Dump Baghouse) |
|---|---|---|

| | | |
|---|---|---|
| 7 (a). Baghouse particulate matter emission concentration.<br>**Note: Provide information in 7(a)-(c) or answer question #8 below.** | 0.2 (no change from permit) gr/dscf | *Manufacturers typically provide guarantees in grains per dry standard cubic foot (gr/dscf). Provide a copy of the guarantee, or other documentation, with the application along with a description of the types of bags that must be used to achieve the emission concentration.* ***Emission concentrations less than 0.01 gr/dscf will receive additional scrutiny by DEQ and a source test of the baghouse may be required.*** *If a guarantee is not provided then you must document how you obtained the emission concentration. Without documentation the application is not complete.* |
| 7 (b). Percentage $PM_{10}$<br>Or Provide $PM_{10}$ Emission Concentration | 100 %<br>_____ gr/dscf | *What percentage of the PM concentration listed in question #7(a) is $PM_{10}$. You must provide documentation as to how the percentage was determined (i.e per the baghouse manufacturer). Without documentation the application is not complete.* |
| 7 (c). Baghouse flow rate | 20,000 (no change from permit) dscfm | *Provide the baghouse flow rate in dry standard cubic feet per minute. Actual cubic feet per minute may be given in lieu of dscfm* ***if it is documented*** *that moisture content is insignificant. You must provide documentation as to how this flow rate was determined (i.e. per the exhaust fan manufacturer, combustion evaluation, etc.). Without documentation the application is not complete.* |
| 8. Baghouse particulate matter control efficiency.<br>**Note: Not needed if section #7 is completed.** | _____ % PM control<br>_____ % $PM_{10}$ control | *Applicant's providing the control efficiency of the baghouse must provide control efficiency for both PM and $PM_{10}$. Provide a copy of the control efficiency documentation with the application. Documentation must include a description of the types of bags that must be used to achieve the control efficiency. Without documentation the application is not complete.* |
| 9. Is the baghouse equipped with a bag leak detector? | ☐ Yes<br>☒ No | *If a bag leak detector is installed provide documentation on the leak detector, including; how the leak detector functions and what level of the output signal indicates that a bag is leaking. Without documentation the application is not complete.* |

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Baghouse Control Equipment **Form BCE**
Revision 6
2/18/10

*Complete this form for each baghouse. Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| 1. Company Name | 2. Facility Name: |
|---|---|
| Lewis Clark-Terminal, Inc. | Lewis-Clark Terminal, Inc. |

3. Brief Project Description: Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 tons/year. There is no change to this existing permitted baghouse.

## BAGHOUSE INFORMATION

| 4. Baghouse Manufacturer: KICE | 5. Baghouse Model: 144-10 | 6. Baghouse Equipment ID: BH03 (West Truck Dump Baghouse) |
|---|---|---|

| | | |
|---|---|---|
| 7 (a). Baghouse particulate matter emission concentration. **Note: Provide information in 7(a)-(c) or answer question #8 below.** | _____ gr/dscf | *Manufacturers typically provide guarantees in grains per dry standard cubic foot (gr/dscf). Provide a copy of the guarantee, or other documentation, with the application along with a description of the types of bags that must be used to achieve the emission concentration.* ***Emission concentrations less than 0.01 gr/dscf will receive additional scrutiny by DEQ and a source test of the baghouse may be required.*** *If a guarantee is not provided then you must document how you obtained the emission concentration. Without documentation the application is not complete.* |
| 7 (b). Percentage $PM_{10}$<br>Or Provide $PM_{10}$ Emission Concentration | _____ %<br>_____ gr/dscf | *What percentage of the PM concentration listed in question #7(a) is $PM_{10}$. You must provide documentation as to how the percentage was determined (i.e per the baghouse manufacturer). Without documentation the application is not complete.* |
| 7 (c). Baghouse flow rate | _____ dscfm | *Provide the baghouse flow rate in dry standard cubic feet per minute. Actual cubic feet per minute may be given in lieu of dscfm* ***if it is documented*** *that moisture content is insignificant. You must provide documentation as to how this flow rate was determined (i.e. per the exhaust fan manufacturer, combustion evaluation, etc.). Without documentation the application is not complete.* |
| 8. Baghouse particulate matter control efficiency. **Note: Not needed if section #7 is completed.** | 99.9 % PM control<br>99.8 % $PM_{10}$ control | *Applicant's providing the control efficiency of the baghouse must provide control efficiency for both PM and $PM_{10}$. Provide a copy of the control efficiency documentation with the application. Documentation must include a description of the types of bags that must be used to achieve the control efficiency. Without documentation the application is not complete.* Attached |
| 9. Is the baghouse equipped with a bag leak detector? | ☐ Yes<br>☒ No | *If a bag leak detector is installed provide documentation on the leak detector, including; how the leak detector functions and what level of the output signal indicates that a bag is leaking. Without documentation the application is not complete.* |

West Truck Dump Kice Baghouse

FILTER MEDIA PERFORMANCE STANDARD FILTER BAGS SL (5-3-2012)

As of 4-1-2008, the standard filter bags supplied with Kice Filters are made of a fabric called Durapex™ PET, made by Polymer Group Inc. It is a 10.5 oz/yd$^2$, 100% polyester, non-woven fabric. Durapex is 99.9% efficient by weight.

This material was independently tested in accordance with the EPA's ETV program. The results of this test follow for two different air-to-cloth ratios.

| | Durapex, 10.5 oz/yd$^2$ | Durapex, 10.5 oz/yd$^2$ |
|---|---|---|
| Air-To-Cloth Ratio (fpm) | 9.8 | 4.9 |
| Inlet Dust Concentration (gr/dscf) | 8.0 | 8.0 |
| $PM_{2.5}$ Concentration Average (gr/dscf) | $1.85 \times 10^{-5}$ | $8.2 \times 10^{-6}$ |
| Total PM Concentration Average (gr/dscf) | $2.95 \times 10^{-5}$ | $3.15 \times 10^{-5}$ |
| Average Pressure Drop ("w.g.) | 5.22 | 1.35 |

The dust collector efficiency rating for 16 oz/yd$^2$ singed polyester felt filter bags is

The ETV testing shows a significant increase in efficiency for the Durapex 10.5 oz/yd^2 over the singed polyester felt filter bags, especially for small particle sizes.

For the complete test report, see the following:

"Environmental Technology Verification Report, Baghouse Filtration Products, Polymer Group, Inc. DURAPEX™ PET Filter Sample" ETS Incorporated, RTI International. September 2001 <http://www.epa.gov/nrmrl/std/etv/pubs/05_vr_durapex.pdf>.

If you have any questions or require more information, please contact us.

Kice Industries Inc
5500 Mill Heights Dr.
Wichita, Ks 67219
(316) 744 - 7151
www.kice.com

**DEQ AIR QUALITY PROGRAM**
1410 N. Hilton, Boise, ID 83706
For assistance, call the
**Air Permit Hotline – 1-877-5PERMIT**

# AIR PERMIT APPLICATION

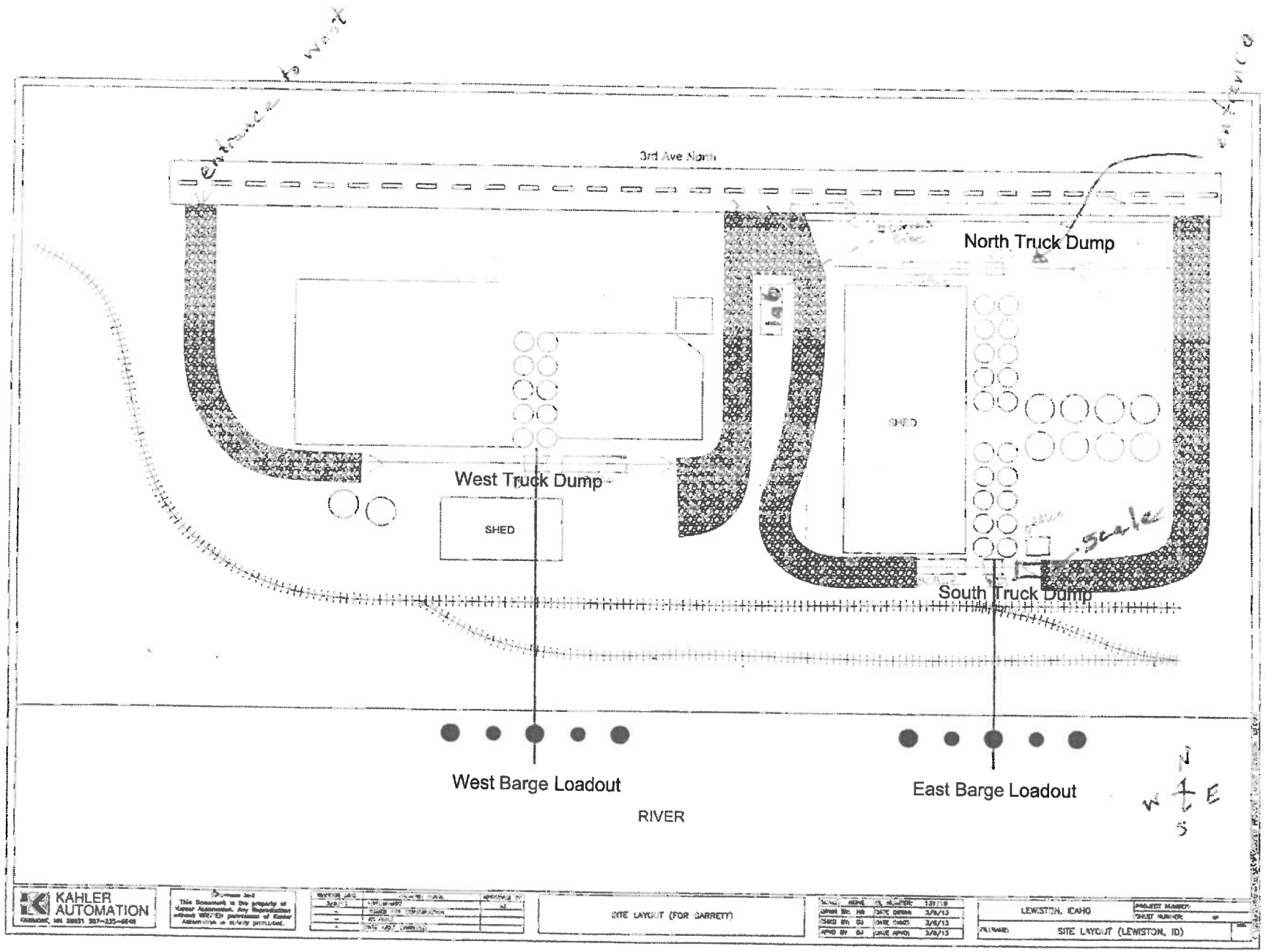
Revision 6
10/7/09

For each box in the table below, CTRL+click on the blue underlined text for instructions and information.

| IDENTIFICATION | |
|---|---|
| 1. Company Name:<br>Lewis-Clark Terminal, Inc. | 2. Facility Name:<br>Lewis-Clark Terminal, Inc. |
| 3. Brief Project Description: | Combine PTC's for both facilities into a single PTC, and permit grain throughput of 750,000 tons/year. |

| APPLICABILITY DETERMINATION | |
|---|---|
| 4. List applicable subparts of the New Source Performance Standards (NSPS) (40 CFR part 60).<br><br>Examples of NSPS affected emissions units include internal combustion engines, boilers, turbines, etc. The applicant must thoroughly review the list of affected emissions units. | List of applicable subpart(s):<br><br>The facility has not been modified or reconstructed after August 3, 1978, therefore 40 CFR 60.300 does not apply (refer to current permits P-060200 & P-2012.0027).<br><br>☑ Not Applicable |
| 5. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) found in 40 CFR part 61 and 40 CFR part 63.<br><br>Examples of affected emission units include solvent cleaning operations, industrial cooling towers, paint stripping and miscellaneous surface coating. EPA has a web page dedicated to NESHAP that should be useful to applicants. | List of applicable subpart(s):<br><br>☑ Not Applicable |
| 6. For each subpart identified above, conduct a complete a regulatory analysis using the instructions and referencing the example provided on the following pages.<br><br>**Note** - Regulatory reviews must be submitted with sufficient detail so that DEQ can verify applicability and document in legal terms why the regulation applies. Regulatory reviews that are submitted with insufficient detail will be determined incomplete. | ☐ A detailed regulatory review is provided (Follow instructions and example).<br><br>☐ DEQ has already been provided a detailed regulatory review. Give a reference to the document including the date. |

Lewis-Clark Terminal, Inc.



# PROPOSED CHANGE IN EMISSIONS

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

Facility Information:

**Facility Throughput:**

| | | | |
|---|---|---|---|
| Bushels | 151 bushels/hr | Estimated Hours of Operation | 3774 hrs/year (no change) |
| | 1,566 bushels/day (average) | | 10 hrs/day (303 days/yr, no change) |
| | 571,429 bushels/year | | 12 hrs/day (62 days/yr, no change) |
| | | | 10.3 hrs/day (average, no change) |
| Pounds | 8,479 lbs/hr | | |
| | 87,671 lbs/day (average) | Conversion Factor | |
| | 32,000,000 lbs/yr | 1 bushel = 56 lbs | |
| Tons | 4 tons/hr | | |
| | 44 tons/day (average) | | |
| | 16,000 tons/yr total throughput increase, for a combined total throughput of 750,000 tons/year[1,2] | | |

**Emission Factors**

| Source | $PM_{10}$ (lbs/ton of grain) | $PM_{2.5}$ (lbs/ton of grain) | Emission Factor Reference |
|---|---|---|---|
| Barge | 0.004 | 0.00055 | AP-42, 5th |
| Truck | 0.029 | 0.0049 | Ed., Chapter |
| Hopper Truck | 0.0078 | 0.0013 | 9.9.1, Table |
| Straight Truck | 0.059 | 0.010 | 9.9.1-1, |
| Storage Bins | 0.0063 | 0.0011 | March 2003 |

**Receiving [3]**

*North End Truck Dump*
Control: Oil Suppression and Baghouse

Throughput [1]
4 tons/hr
41 tons/day
135,000 tons/yr (Under permit # P-060200)
15,000 tons/yr (Proposed increase)

| | $PM_{10}$ | | | | $PM_{2.5}$ | | | |
|---|---|---|---|---|---|---|---|---|
| | lb/hr | lb/day | lb/yr | ton/yr | lb/hr | lb/day | lb/yr | ton/yr |
| Straight Truck (25%) | 5.9E-02 | 6.1E-01 | 2.2E+02 | 1.1E-01 | 9.9E-03 | 1.0E-01 | 3.8E+01 | 1.9E-02 |
| Hopper Truck (75%) | 2.3E-02 | 2.4E-01 | 8.8E+01 | 4.4E-02 | 3.9E-03 | 4.0E-02 | 1.5E+01 | 7.3E-03 |
| **Uncontrolled Total:** | **8.2E-02** | **8.5E-01** | **3.1E+02** | **1.5E-01** | **9.9E-03** | **1.0E-01** | **3.8E+01** | **1.9E-02** |
| Controlled Total [4] | 1.2E-03 | 1.3E-02 | 4.6E+00 | 2.3E-03 | 1.5E-04 | 1.5E-03 | 5.5E-01 | 2.8E-04 |

*Calculate Grain Loading:*
0.0008 lbs/hr (maximum emissions, assuming 99.9% control efficiency)
16,000 cfm (per Statement of Basis for PTC No. P-060200); assume cfm = dscfm
0.1 gr/dscf (calculated)

*South End Truck Dump*
Control: Oil Suppression and Baghouse

Throughput [1]
No change tons/hr
No change tons/day (average)
375,000 tons/yr (Under permit # P-060200)
0 tons/yr (Proposed increase)

| | $PM_{10}$ | | | | $PM_{2.5}$ | | | |
|---|---|---|---|---|---|---|---|---|
| | 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: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Controlled Total [4] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

*Calculate Grain Loading:*
0.002 lbs/hr (maximum emissions, assuming 99.9% control efficiency)
20,000 cfm (per Statement of Basis for PTC No. P-060200); assume cfm = dscfm
0.2 gr/dscf (calculated)

*West Truck Dump*
Control: Baghouse

Throughput [2]
0.26 tons/hr
2.7 tons/day
224,000 tons/yr (Under permit # P-2012.0027)
1,000 tons/yr (Proposed increase)

| | $PM_{10}$ | | | | $PM_{2.5}$ | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 | 6.8E-03 | 2.5E+00 | 1.3E-03 |
| Hopper Truck (75%) | 1.6E-03 | 1.6E-02 | 5.9E+00 | 2.9E-03 | 2.6E-04 | 2.7E-03 | 9.8E-01 | 4.9E-04 |
| **Uncontrolled Total:** | **5.5E-03** | **5.6E-02** | **2.1E+01** | **1.0E-02** | **6.6E-04** | **6.8E-03** | **2.5E+00** | **1.3E-03** |
| Controlled Total [5] | 1.1E-05 | 1.1E-04 | 4.1E-02 | 2.1E-05 | 2.3E-05 | 2.3E-04 | 8.5E-02 | 4.3E-05 |

*Calculate Grain Loading:*
99.9% PM Control efficiency (per manufacturer)
8 gr/dscf Inlet Loading
~0.1 gr/dscf

**Shipping**

*East Barge Loadout*
Control: Oil suppression & baghouse on bin transfers

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

| | $PM_{10}$ | | | | $PM_{2.5}$ | | | |
|---|---|---|---|---|---|---|---|---|
| | lb/hr | lb/day | lb/yr | ton/yr | lb/hr | lb/day | lb/yr | ton/yr |
| Barge (100%) | 1.6E-02 | 1.6E-01 | 6.0E+01 | 3.0E-02 | 2.2E-03 | 2.3E-02 | 8.3E+00 | 4.1E-03 |
| Uncontrolled Total: | 1.6E-02 | 1.6E-01 | 6.0E+01 | 3.0E-02 | 2.2E-03 | 2.3E-02 | 8.3E+00 | 4.1E-03 |
| Controlled Total [4] | 2.4E-04 | 2.5E-03 | 9.0E-01 | 4.5E-04 | 3.3E-05 | 3.4E-04 | 1.2E-01 | 6.2E-05 |

*West (Former CLD) Barge Loadout*
Control: Oil suppression

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

| | $PM_{10}$ | | | | $PM_{2.5}$ | | | |
|---|---|---|---|---|---|---|---|---|
| | lb/hr | lb/day | lb/yr | ton/yr | lb/hr | lb/day | lb/yr | ton/yr |
| Barge (100%) | 1.1E-03 | 1.1E-02 | 4.0E+00 | 2.0E-03 | 1.5E-04 | 1.5E-03 | 5.5E-01 | 2.8E-04 |
| Uncontrolled Total: | 1.1E-03 | 1.1E-02 | 4.0E+00 | 2.0E-03 | 1.5E-04 | 1.5E-03 | 5.5E-01 | 2.8E-04 |
| Controlled Total [6] | 3.2E-04 | 3.3E-03 | 1.2E+00 | 6.0E-04 | 4.4E-05 | 4.5E-04 | 1.7E-01 | 8.3E-05 |

**Storage**

*Storage Bins - For North & South Truck Dumps*
Control: Oil suppression

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

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

| | $PM_{10}$ | | | | $PM_{2.5}$ | | | |
|---|---|---|---|---|---|---|---|---|
| | lb/hr | lb/day | lb/yr | ton/yr | lb/hr | lb/day | lb/yr | ton/yr |
| Storage Bins | 2.5E-02 | 2.6E-01 | 9.5E+01 | 4.7E-02 | 4.4E-03 | 4.5E-02 | 1.7E+01 | 8.3E-03 |
| Uncontrolled Total: | 2.5E-02 | 2.6E-01 | 9.5E+01 | 4.7E-02 | 4.4E-03 | 4.5E-02 | 1.7E+01 | 8.3E-03 |
| Controlled Total [4] | 7.5E-03 | 7.8E-02 | 2.8E+01 | 1.4E-02 | 1.3E-03 | 1.4E-02 | 5.0E+00 | 2.5E-03 |

*Storage Bins - For West Truck Dump*
Control: None

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

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

| | $PM_{10}$ | | | | $PM_{2.5}$ | | | |
|---|---|---|---|---|---|---|---|---|
| | lb/hr | lb/day | lb/yr | ton/yr | lb/hr | lb/day | lb/yr | ton/yr |
| Storage Bins | 1.7E-03 | 1.7E-02 | 6.3E+00 | 3.2E-03 | 2.9E-04 | 3.0E-03 | 1.1E+00 | 5.5E-04 |
| Uncontrolled Total: | 1.7E-03 | 1.7E-02 | 6.3E+00 | 3.2E-03 | 2.9E-04 | 3.0E-03 | 1.1E+00 | 5.5E-04 |
| 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-04 |

*Temporary Outdoor Storage Piles*

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

**Emissions Summary**

| | *Current Permitted Emissions* | | | *Proposed Change in Emissions* | | | | *Total Emissions* | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Receiving** | **Storage Bins** | **Shipping** | **Receiving** | **Storage Bins** | **Shipping** | **Total** | **Receiving** | **Storage Bins** | **Shipping** | **Total** |
| $PM_{10}$ (lb/hr) | 4.4E-02 | 3.7E-01 | 8.0E-02 | 1.2E-03 | 8.0E-03 | 5.6E-04 | 9.8E-03 | 4.5E-02 | 3.8E-01 | 8.0E-02 | 5.0E-01 |
| $PM_{10}$ (lb/day) | 4.6E-01 | 3.8E+00 | 8.2E-01 | 1.3E-02 | 8.3E-02 | 5.8E-03 | 1.0E-01 | 4.7E-01 | 3.9E+00 | 8.3E-01 | 5.2E+00 |
| $PM_{10}$ (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 | 1.4E+03 | 3.0E+02 | 1.8E+03 |
| $PM_{10}$ (ton/yr) | 5.7E-02 | 6.9E-01 | 1.5E-01 | 2.3E-03 | 1.5E-02 | 1.1E-03 | 1.9E-02 | 5.9E-02 | 7.1E-01 | 1.5E-01 | 9.2E-01 |
| $PM_{2.5}$ (lb/hr) | 5.4E-03 | 6.4E-02 | 1.1E-02 | 1.7E-04 | 1.4E-03 | 7.7E-05 | 1.6E-03 | 5.5E-03 | 6.6E-02 | 1.1E-02 | 8.2E-02 |
| $PM_{2.5}$ (lb/day) | 5.5E-02 | 6.6E-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 |
| $PM_{2.5}$ (lb/yr) | 2.0E+01 | 2.4E+02 | 4.1E+01 | 6.5E-01 | 5.3E+00 | 2.9E-01 | 6.2E+00 | 2.1E+01 | 2.5E+02 | 4.2E+01 | 3.1E+02 |
| $PM_{2.5}$ (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 |

Notes:

[1] The total facility throughput of 750,000 tons/year is to be distributed as follows: 20% through the North Truck Dump, 30% through the West Truck Dump, and 50% through the South Truck Dump. The increased throughput for each pit due to the proposed facility throughput increase is addressed on a tonnage basis.

[2] PTC No. P-2012.0027 and its Statement of Basis do not provide a production limit. Based on a public records request submitted to IDEQ on 4/2/2013, 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.

[3] Per PTC No. P-060200: 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 delivery.

[4] Per PTC No. P-060200: Emissions are controlled by 70% efficient food grade oil dust suppressant and 95% efficient Kice baghouse. The Kice baghouse design efficiency is 99.9% but applicant used only 95% in the application. 95% control efficiency was therefore used in this application for consistency with prior permitting actions.

[5] The Kice baghouse design efficiency is 99.9% for Total PM, and 99.8% for PM10 per manufacturer's specifications.

[6] Emissions are controlled by 70% efficient food grade oil suppressant.

**Modeling Threshold Comparison**

| Pollutants | Modeling Threshold* (lb/hr) | Modeling Threshold (TPY) | Proposed Emissions Change (lb/hr) | Proposed Emissions Change (ton/yr) | Modeling Required? |
|---|---|---|---|---|---|
| $PM_{10}$ | 0.22 | -- | 0.010 | 0.019 | No |
| $PM_{2.5}$ | 0.054 | 0.35 | 0.0016 | 0.0031 | No |

*Modeling Thresholds from Table 2 of "State of Idaho Guideline for Performing Air Quality Impact Analyses".