

RECEIVED

NOV 02 1998

**BUREAU OF
AIR REGULATION**

Angelo's Recycled Materials, Inc.

*Cedarapids Inc. - Portable Reclaimed
Aggregate Processing Plant No.2*

*FDEP "After-the-Fact" Construction Permit
Application*

October - 1998



Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

Identification of Facility Addressed in This Application


Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

| | |
|--|--|
| 1. Facility Owner/Company Name: Angelo's Recycled Materials, Inc. | |
| 2. Site Name: Angelo's Recycled Materials, Inc. - Plant No.2 | |
| 3. Facility Identification Number: <input checked="" type="checkbox"/> Unknown | |
| 4. Facility Location: Street Address or Other Locator: 2875 Wekiwa Drive City: Apopka County: Orange Zip Code: 32703 | |
| 5. Relocatable Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 6. Existing Permitted Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Application Processing Information (DEP Use)

| | |
|------------------------------------|--|
| 1. Date of Receipt of Application: | |
| 2. Permit Number: | |
| 3. PSD Number (if applicable): | |
| 4. Siting Number (if applicable): | |

Owner/Authorized Representative or Responsible Official

| |
|--|
| 1. Name and Title of Owner/Authorized Representative or Responsible Official: Mr. Bob Coble, General Manager |
| 2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Angelo's Recycled Materials, Inc. Street Address: P.O. Box 1493 City: Largo State: Florida Zip Code: 33779-1493 |
| 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (727) 581-1544 Fax: (727) 586-5676 |
| 4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i> <div style="display: flex; justify-content: space-between;"><div style="width: 45%;"> _____ Signature</div><div style="width: 45%; text-align: right;"><u>10/28/98</u> _____ Date</div></div> |

* Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

| Emissions Unit ID | Description of Emissions Unit | Permit Type |
|--------------------------|---|--------------------|
| 001 | Cedarapids Inc., Model 3054 Jaw (Primary) Crushing Unit, utilized to crush reclaimed concrete or asphalt to desired sizes. | AF2A |
| 002 | Cedarapids Inc., Model 4242 Impact (Secondary)Crushing Unit, utilized to further process aggregate that was uncrushed by the primary crushing unit. | |
| 003 | Cedarapids Triple Deck Screener (7 x 20') utilized to screen crushed aggregate and separate and to send uncrushed, oversize rock or asphalt to impact (secondary) crusher for reprocessing. | |
| 004 | Feed Conveyor (4 x 30') mounted in feeder hopper used to primary crushed aggregate to screening conveyor through magnet system. | |
| 005 | Screening Conveyor (4 x 50') utilized to transfer primary crushed aggregate to triple deck screener. | |
| 006 | Oversize Belt (4 x 60') utilized to transfer oversized primary crushed aggregate that would not pass through triple deck screener to impact (secondary) crusher. | |
| 007 | Material Conveyor (4 x 65') utilized to transfer secondary crushed aggregates from impact crusher back to triple deck screening device. | |
| 008 | Portable Radial Stacking Belt (4 x 90') utilized to transfer finished product to stockpiles or trucks. | |
| 009 | Portable Radial Stacking Belt (4 x 80') utilized to transfer finished product to stockpiles or trucks. | |
| 010 | Portable Radial Stacking Belt (4 x 60') utilized to transfer finished product to stockpiles or trucks. | |
| 011 | Caterpillar – 800 kW Generator Set used to supply power to the crushing plant, fired on No. 2 Diesel Fuel, with < 0.50% sulfur by weight. | |
| 012 | Fugitive Emissions from Unpaved / Paved Haul Roads. | |
| 013 | Fugitive emissions from stockpiles and conveyor drops to stockpiles from conveyor belts | |
| 014 | Cedarapids, Inc. – Vibrating Grizzly Feeder /Receiving Hopper, used to vibrate material dumped into hopper by loader to jaw (primary) crushing unit. | |

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain:

- ☐ Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
- ☐ Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

- ☐ Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: _____

- ☐ Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit to be revised: _____

- ☐ Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: _____

- ☐ Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: _____

Reason for revision: _____

Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain:

- ☐ Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): _____

- ☐ Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: _____

- ☐ Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit to be revised: _____

Reason for revision: _____

Category III: All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain:

- ☐ Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: _____

- ☐ Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): _____

- ☒ Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one:

☒ Attached - Amount: \$ \$2250.00 ~~***3000.00~~ ☐ Not Applicable.
(\$2000.00 for generator-set and ~~\$1000.00~~ \$250.00 for crushing plant)
Construction/Modification Information

1. Description of Proposed Project or Alterations:

This project will consist of a state-wide "after-the-fact" construction permit for a portable Cedarapids, Inc., Concrete and Reclaimed Asphalt – Aggregate Processing Unit owned and operated by Angelo's Recycled Materials, Inc. Any emissions that might be generated by various emission points throughout the crushing unit are controlled by a Self-made Water Suppression System w/ spray bars located at all the various emissions throughout the plant.

All stockpiles and roadways, where this crushing unit is located are watered on a regular basis by water truck equipped with spray bars, to control any fugitive emissions that may be generated by vehicular traffic or prevailing winds.

This facility will comply with all applicable Florida Department of Environmental Protection (FDEP) air pollution rules and regulations.

In addition, Angelo's Recycled Materials has published notification of similar crusher in newspapers throughout the state. This legal advertisement is to be found in the Supplemental Section V of this permit application.

2. Projected or Actual Date of Commencement of Construction:

ASAP

3. Projected Date of Completion of Construction:

After the Fact

Professional Engineer Certification

1. Professional Engineer Name: **George C. Sinn, Jr., P.E.**
Registration Number: **16911**

2. Professional Engineer Mailing Address:

Organization/Firm: : **Central Florida Testing Laboratories, Inc.**
Street Address: **12625 - 40th Street North**
City: **Clearwater** State: **Florida** Zip Code: **33762**

3. Professional Engineer Telephone Numbers:

Telephone: **(727) 572-9797**

Fax: **(727) 299-0023**

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

*(2) To the best of my knowledge, any emission estimates reported** or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

(seal)

STATE OF

FLORIDA

ENGINEER

Date

10-12-98

*Attach any exception to certification statement.

**This excludes certification of any test data, and equipment manufacturer's specifications that were certified by others.

Application Contact

1. Name and Title of Application Contact:

Mr. Bernard A. Ball, Jr., Environmental Specialist

2. Application Contact Mailing Address:

Organization/Firm: **Central Florida Testing Laboratories, Inc.**

Street Address: **12625 - 40th Street North**

City: **Clearwater**

State: **Florida**

Zip Code: **33762**

3. Application Contact Telephone Numbers:

Telephone: **(727) 572-9797**

Fax: **(727) 299-0023**

Application Comment

This project consists of a statewide “after-the-fact” construction permit application for a Cedarpids, Inc., Portable Concrete and Reclaimed Asphalt, Aggregate Processing Unit owned and operated by Angelo’s Recycled Materials, Inc. Any emissions that might be generated at nine various emission points throughout the crushing unit are controlled by a self-made Water Suppression System w/ spray bars located at all the various emission points throughout the plant.

All stockpiles and roadways, where this crushing unit is located are watered on a regular basis by water truck equipped with spray bars and a long range water propulsion gun, to control any fugitive emissions that may generated by vehicular traffic or prevailing winds.

This facility is a natural non-Title V facility and will comply with all FDEP Rules and Regulations.

In addition, Angelo’s Recycled Materials has published notification of similar crusher in newspapers throughout the state. This legal advertisement is to be found in the Supplemental Section V of this permit application.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

| | | | |
|--|--------------------------------------|--|---------------------------------|
| 1. Facility UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 | | | |
| 2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 28°38'19" Longitude (DD/MM/SS): 81°27'42" | | | |
| 3. Governmental Facility Code: O | 4. Facility Status Code: C | 5. Facility Major Group SIC Code: 14 | 6. Facility SIC(s): 1439 |
| <p>11. Facility Comment: This project will consist a statewide "after-the-fact" construction permit for a portable Cedarapids, Inc. Concrete and Reclaimed Asphalt Crushing Aggregate Processing Unit owned and operated by Angelo's Recycled Materials, Inc. Any emissions that might be generated by various emission points throughout the crushing unit are controlled by a Self-Made Water Dust Suppression System w/ spray bars located at all the various emissions throughout the plant.</p> <p>All stockpiles and roadways, where this crushing unit is located are watered on a regular basis by water truck equipped with spray bars, to control any fugitive emissions that may be generated by vehicular traffic or prevailing winds.</p> <p>This facility will comply with all applicable Florida Department of Environmental Protection (FDEP) air pollution rules and regulations.</p> | | | |

Facility Contact

| |
|--|
| 1. Name and Title of Facility Contact: Mr. Bob Coble, General Manager |
| 2. Facility Contact Mailing Address: Organization/Firm: Angelo's Recycled Materials, Inc. Street Address: P.O. Box 1493 City: Largo State: Florida Zip Code: 33779-1493 |
| 3. Facility Contact Telephone Numbers: Telephone: (727) 581-1544 Fax: (727) 586-5676 |

Facility Regulatory Classifications

| |
|---|
| 1. Small Business Stationary Source? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown |
| 2. Title V Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 3. Synthetic Non-Title V Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 5. Synthetic Minor Source of Pollutants Other than HAPs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 6. Major Source of Hazardous Air Pollutants (HAPs)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 7. Synthetic Minor Source of HAPs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 8. One or More Emissions Units Subject to NSPS? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 9. One or More Emission Units Subject to NESHAP? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 10. Title V Source by EPA Designation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 11. Facility Regulatory Classifications Comment (limit to 200 characters): This facility is a natural non-Title V Source, subject to rules and regulations of 40 CFR 60, subpart 000. |

B. FACILITY REGULATIONS

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| |
|---|
| 62-212.200(56) FAC |
| 62-296.800 FAC |
| 40 CFR 60, Subpart 000 |
| 62-296.310 (2) FAC |
| 62-297 FAC |
| 62-297.340 FAC |
| 62-210.350 FAC |
| Chapter 84-446, Section 3(12) FS |
| 62-296.320 FAC |
| 62-296.310(3) FAC |
| 40 CFR 60.11 (d) |
| 62-4 FAC |
| 62-210 |
| |
| |
| |
| |
| |
| |
| |

C. FACILITY POLLUTANTS

Facility Pollutant Information

| 1. Pollutant Emitted | 2. Pollutant Classification |
|--------------------------------|-----------------------------|
| Particulate Matter 10 | C |
| Nitrogen Oxides | B |
| Carbon Monoxide | B |
| Sulfur Oxides | B |
| Total Organic Compounds | B |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information: Pollutant 1 of 5

| |
|--|
| 1. Pollutant Emitted: PM10 |
| 2. Estimated Emissions: 5.49 ton/yr |
| 3. Requested Emissions Cap: (#1) < 10 % Opacity from transfer points, belt conveyors, < 15 % Opacity from crusher and screener < 20% opacity from Caterpillar Gen-Set Exhaust, < 5% opacity from all vehicular traffic and roadways. |
| 4. Basis for Emissions Cap Code: 40 CFR 60, subpart 000 |
| 5. Facility Pollutant Comment: Facility is subject to opacity limitations only. |

Facility Pollutant Detail Information: Pollutant 2 of 5

| |
|---|
| 1. Pollutant Emitted: NOx (Caterpillar Gen-Set) |
| 2. Estimated Emissions: 18.26 lb/hr or 28.49 ton/yr |
| 3. Requested Emissions Cap: < 20% Opacity |
| 4. Basis for Emissions Cap Code: FAC 62-296.310 |
| 5. Facility Pollutant Comment: Generator subject to opacity limits only. |

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information: Pollutant 3 of 5

| |
|---|
| 1. Pollutant Emitted: CO (Caterpillar Gen-Set) |
| 2. Estimated Emissions: 3.93 lb/hr or 6.14 ton/yr |
| 3. Requested Emissions Cap: < 20% Opacity |
| 4. Basis for Emissions Cap Code: 62-396.310 |
| 5. Facility Pollutant Comment: Generator subject to opacity limits only. |

Facility Pollutant Detail Information: Pollutant 4 of 5

| |
|---|
| 1. Pollutant Emitted: SOx (Caterpillar Gen-Set) |
| 2. Estimated Emissions: 1.20 lb/hr or 1.87 ton/yr |
| 3. Requested Emissions Cap: < 20% Opacity |
| 4. Basis for Emissions Cap Code: 62-296.310 |
| 5. Facility Pollutant Comment: Generator subject to opacity limits only. |

Facility Pollutant Detail Information: Pollutant 5 of 5

| |
|---|
| 1. Pollutant Emitted: Total TOC |
| 2. Estimated Emissions: 1.49 lb/hr or 2.32 ton/yr |
| 3. Requested Emissions Cap: : < 20% Opacity |
| 4. Basis for Emissions Cap Code: 62-296.310 |
| 5. Facility Pollutant Comment: Generator subject to opacity limits only. |

Facility Pollutant Detail Information: Pollutant of

| |
|--|
| 1. Pollutant Emitted: |
| 2. Requested Emissions Cap: (lb/hour) (tons/year) |
| 3. Basis for Emissions Cap Code: |
| 4. Facility Pollutant Comment (limit to 400 characters): |

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

| |
|--|
| 1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: <u>I</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 2. Facility Plot Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>II</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID: <u>III</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input checked="" type="checkbox"/> Attached, Document ID: <u>IV</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested <i>* All areas within facility are continuously sprayed w/ water to control fugitives.</i> |
| 5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 6. Supplemental Information for Construction Permit Application: <input checked="" type="checkbox"/> Attached, Document ID: <u>V</u> <input type="checkbox"/> Not Applicable |

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 7. List of Proposed Exempt Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 8. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable |
| 9. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 10. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

| |
|--|
| 11. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Compliance Assurance Monitoring Plan: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Risk Management Plan Verification: <input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached, Document ID: _____ <input type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date <input checked="" type="checkbox"/> Not Applicable |
| 14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.1

**PRIMARY
JAW CRUSHER**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one:

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

| | | |
|---|--------------------------------------|--|
| 1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Cedarapids, Inc. – Model 3054 Jaw Crusher. | | |
| 2. Emissions Unit Identification Number: [] No Corresponding ID [X] Unknown 001 | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Emissions Unit Comment (limit to 500 characters) The emission unit is a Cedarapids, Inc. Model 3054 Jaw Crusher. | | |

Emissions Unit Control Equipment

A.

| |
|--|
| 1. Description (limit to 200 characters): The fugitive emissions generated by this jaws crushing unit are controlled by a Water Spray Bar System located in the feed hopper, used to dampen the material to control any emissions generated in the feed hopper and the jaws crushing unit. The material that is to be crushed is also dampened in it's stockpile as to control emissions in the grizzly feeder, the feeder hopper and in the crushing unit as well as any fugitives generated by prevailing winds. |
| 2. Control Device or Method Code: 061, 062, and 99 |

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

| |
|---|
| 1. Initial Startup Date: "After the Fact" |
| 2. Long-term Reserve Shutdown Date: NA |
| 3. Package Unit: Reclaimed Asphalt and Concrete Aggregate Processing Unit – Jaw Crusher Manufacturer: Cedarapids, Inc. Model Number: 3054 |
| 4. Generator Nameplate Rating: NA MW |
| 5. Incinerator Information: NA Dwell Temperature: °F (in the secondary chamber) Dwell Time: seconds (minimum); |

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: None |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: 200 ton/hr of reclaimed concrete or asphalt material. |
| 4. Maximum Production Rate: 200 ton/hr of reclaimed concrete or asphalt material. (dependent on material characteristics) |
| 5. Maximum Production Rate: 200 ton/hr as reclaimed concrete or asphalt material. (***) dependent on material characteristics) |
| 5. Operating Capacity Comment: Dampened, reclaimed concrete or asphalt material is feed into the grizzly feeder of the plant where any fugitive emissions generated are controlled by the Water Spray Dust Suppression System which sprays the material with water and dust suppression chemical before entering the jaws crusher of the plant. *** Material characteristics consist of moisture, hardness and size. |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|------------------------|--|
| Requested Maximum Operating Schedule: | | |
| 10 hours/day | 6 days/week | |
| 52 weeks/year | 3120 hours/year | |

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| |
|----------------------------------|
| 62-212.200(56) FAC |
| 62-296.800 FAC |
| 40 CFR 60, Subpart 000 |
| 62-296.310 (2) FAC |
| 62-297 FAC |
| 62-297.340 FAC |
| 62-210.350 FAC |
| Chapter 84-446, Section 3(12) FS |
| 62-296.320 FAC |
| 62-296.310(3) FAC |
| 40 CFR 60.11 (d) |
| 62-4 FAC |
| 62-210 |
| |
| |
| |
| |
| |
| |
| |
| |

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

| | | | |
|---|---------------------------------------|----------------------------|---------------------------------------|
| 1. Identification of Point on Plot Plan or Flow Diagram: | | | |
| Jaw Crushing Unit No.1 – EP. 001 | | | |
| 2. Emission Point Type Code: | | | |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input checked="" type="checkbox"/> 4 |
| 2. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): | | | |
| Bottom of preliminary crushing unit. | | | |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: | | | |
| EP-001 | | | |
| 5. Discharge Type Code: | | | |
| <input type="checkbox"/> D | <input checked="" type="checkbox"/> F | <input type="checkbox"/> H | <input type="checkbox"/> P |
| <input type="checkbox"/> R | <input type="checkbox"/> V | <input type="checkbox"/> W | |
| 6. Stack Height: Not Applicable (Emission Point Height ~ 3-4' above surface) | | | |
| 7. Exit Diameter: | | | |
| 8. Exit Temperature: | | | |

Emissions Unit Information Section 1 of 14 .

| | | |
|--|--|--|
| 9. Actual Volumetric Flow Rate: | | |
| 10. Percent Water Vapor : ~ 4% moisture | | |
| 11. Maximum Dry Standard Flow Rate: | | |
| 12. Nonstack Emission Point Height: ~ 3-4 feet | | |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 | | |
| 14. Emission Point Comment (limit to 200 characters): Fugitive emissions from this emission point will generally appear at bottom of crushing unit were material falls into discharge pan. | | |

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 1

| | |
|--|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Cedarapids Jaw Crushing Unit | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 3. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/hr |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: NA | 8. Maximum Percent Ash: NA |
| 9. Million Btu per SCC Unit: NA | |
| 10. Segment Comment (limit to 200 characters): | |

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

[illegible]

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

| | |
|---|---|
| 1. Pollutant Emitted: | PM10 |
| 2. Total Percent Efficiency of Control: | 90 % |
| 3. Primary Control Device Code: | 061, 062, and 099 |
| 4. Secondary Control Device Code: | NA |
| 5. Potential Emissions: | 0.12 lb/hr or 0.18 ton/yr |
| 6. Synthetically Limited? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 7. Range of Estimated Fugitive/Other Emissions: | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year |
| 8. Emission Factor: | 0.00059 lb/ton Reference: AP-42 |
| 9. Emissions Method Code: | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| 10. Calculation of Emissions: | PM10_{year} = [(200 ton/hr)(3120 hr/yr)(0.00059 lb/ton)] / 2000 lb/ton = 0.18 ton/yr PM10_{hour} = (200 ton/hr)(0.00059 lb/ton) = 0.12 lb/hr |

Emissions Unit Information Section 1 of 14 .

Pollutant Potential/Estimated Emissions: Pollutant _____ of _____

| | | | |
|--|---------|-----------|--|
| 1. Pollutant Emitted: | | | |
| 2. Total Percent Efficiency of Control: | | | |
| 3. Primary Control Device Code: | | | |
| 4. Secondary Control Device Code: | | | |
| 5. Potential Emissions: | lb/hour | tons/year | |
| 6. Synthetically Limited? [] Yes [] No | | | |
| 7. Range of Estimated Fugitive/Other Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year | | | |
| 8. Emission Factor: Reference: | | | |
| 9. Emissions Method Code: [] 1 [] 2 [] 3 [] 4 [] 5 | | | |
| 10. Calculation of Emissions: | | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | | |

Allowable Emissions (Pollutant identified on front of page)

A.

| |
|---|
| 1. Basis for Allowable Emissions Code: This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: < 15% Opacity per subpart 000. |
| 4. Equivalent Allowable Emissions: 018 lb/hour 0.12 tons/year |
| 5. Method of Compliance: Initial and Annual EPA Method 5 Visible Emission Compliance Testing |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

B.

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Pollutant Detail Information:

32

Emissions Unit Information Section 1 of 14 .

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

| | | | | |
|--|------------------------------|------------------------------|--|-----------|
| 3. Increment Consuming/Expanding Code: | | | | |
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No | |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No | |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No | |
| 4. Baseline Emissions: (for burning pit only) | | | | |
| PM | 0.18 | lb/hour | 0.12 | tons/year |
| SO2 | | lb/hour | | tons/year |
| NO2 | | lb/hour | | tons/year |
| 5. PSD Comment: | | | | |
| | | | | |

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [X] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable |

Additional Supplemental Requirements for Category I Applications Only

| |
|---|
| 10. Alternative Methods of Operation [] Attached, Document ID: _____ [X] Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) [] Attached, Document ID: _____ [X] Not Applicable |
| 12. Enhanced Monitoring Plan [] Attached, Document ID: _____ [X] Not Applicable |
| 13. Identification of Additional Applicable Requirements [] Attached, Document ID: _____ [X] Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) [] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [X] Not Applicable |

EMISSIONS POINT No.2

**SECONDARY
IMPACT CRUSHER**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Description and Status

| | | |
|--|---|---|
| 1. Description of Emissions Unit Addressed in This Section: Cedarapids, Inc. - Model 4242 Impact Crusher | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: Reclaimed Asphalt and Concrete Aggregate Processing Unit - Impact Crusher Manufacturer: Cedarapids, Inc. Model Number: 4242 | | |
| 9. Generator Nameplate Rating: NA | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: | | |

Emissions Unit Control Equipment

A.

1. Description:

The fugitive emissions generated by this crushing unit are controlled by a Spray Bar System located throughout the unit, used to dampen the material to control any emissions generated in the crushing process. The material that is to be crushed is also dampened in it's stockpile as to control emissions in the crusher as well as any fugitives generated by prevailing winds.

2. Control Device or Method Code: 061, 062 and 099

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: NONE |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: 200 ton/hr as reclaimed concrete or asphalt material (**dependent on material characteristics). |
| 4. Maximum Production Rate: 200 ton/hr as reclaimed concrete or asphalt material (**dependent on material characteristics). |
| <p>5. Operating Capacity Comment:</p> <p>Dampened, reclaimed concrete or asphalt material is feed into the grizzly feeder of the plant where any fugitive emissions generated are controlled by the Water Spray Dust Suppression System which sprays the material with water and dust suppression chemical before entering the jaws crusher of the plant.</p> <p>** Material Characteristics consist of moisture, hardness and size.</p> |

Emissions Unit Operating Schedule

| | |
|---------------------------------------|------------------------|
| Requested Maximum Operating Schedule: | |
| 10 hours/day | 6 days/week |
| 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| |
|----------------------------------|
| 62-212.200(56) FAC |
| 62-296.800 FAC |
| 40 CFR 60, Subpart 000 |
| 62-296.310 (2) FAC |
| 62-297 FAC |
| 62-297.340 FAC |
| 62-210.350 FAC |
| Chapter 84-446, Section 3(12) FS |
| 62-296.320 FAC |
| 62-296.310(3) FAC |
| 40 CFR 60.11 (d) |
| 62-4 FAC |
| 62-210 |
| |
| |
| |
| |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| | | | |
|---|--|--|--|
| 1. Identification of Point on Plot Plan or Flow Diagram: Impact Crushing Unit No.2 – EP 002 | | | |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 | | | |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: | | | |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA | | | |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W | | | |
| 6. Stack Height: NA | | | |
| 7. Exit Diameter: NA | | | |
| 8. Exit Temperature: | | | |
| 9. Actual Volumetric Flow Rate: | | | |

| |
|--|
| 10. Percent Water Vapor: 4% moisture |
| 11. Maximum Dry Standard Flow Rate: NA dscfm |
| 12. Nonstack Emission Point Height: ~3-5 feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|--|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Reclaimed Asphalt and Concrete Aggregate Processing Unit - Impact Crusher | |
| 2. Source Classification Code (SCC): 14 | |
| 3. SCC Units: tons processed per hour | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: NA | 8. Maximum Percent Ash: NA |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): <p style="text-align: center;">200 TPH - Reclaimed Asphalt and Concrete Aggregate Processing Unit - Impact Crusher</p> | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 **of** 1

| | | |
|---|-------------------|--------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: 90% | | |
| 3. Primary Control Device Code: 060, 062, and 099 | | |
| 4. Secondary Control Device Code: NA | | |
| 5. Potential Emissions: | 0.12 lb/hr | 0.18 ton/yr |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.00059 lbs/ton Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: $\text{PM10}_{\text{year}} = [(200 \text{ ton/hr})(3120 \text{ hr/yr})(0.00059 \text{ lb/ton})] / 2000 \text{ lb/ton} = 0.18 \text{ ton/yr}$ $\text{PM10}_{\text{hour}} = (200 \text{ ton/hr})(0.00059 \text{ lb/ton}) = 0.12 \text{ lb/hr}$ | | |
| 11. Pollutant Potential/Estimated Emissions Comment: Emissions based on worse case scenario @ highest production rate | | |

Allowable Emissions

| |
|--|
| 1. Basis for Allowable Emissions Code: This Facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations |
| 2. Future Effective Date of Allowable Emissions: Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: <15 % Opacity |
| 4. Equivalent Allowable Emissions: 0.18 lb/hour 0.12 tons/year |
| 5. Method of Compliance: Initial and annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field

1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|---|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other Subpart 000 |
| 3. Requested Allowable Opacity: | Normal Conditions: <15 % Exceptional Conditions: <15 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Initial and annual EPA Method 9 test on this unit. |
| 5. Visible Emissions Comment: | |

Emissions Unit Information Section 2 of 14 .

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

| |
|---|
| 1. Visible Emissions Subtype: |
| 2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour |
| 4. Method of Compliance: |
| 5. Visible Emissions Comment: |

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

| |
|---|
| 1. Visible Emissions Subtype: |
| 2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour |
| 4. Method of Compliance: |
| 5. Visible Emissions Comment: |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|--------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule. | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

Emissions Unit Information Section 2 of 14 .

Continuous Monitoring System: Continuous Monitor _____ of _____

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

Continuous Monitoring System: Continuous Monitor _____ of _____

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

| | | | | |
|--|------------------------------|------------------------------|--|-----------|
| 3. Increment Consuming/Expanding Code: | | | | |
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No | |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No | |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No | |
| 4. Baseline Emissions: (for diesel generator only) | | | | |
| PM | 0.18 | lb/hour | 0.12 | tons/year |
| SO2 | | lb/hour | | tons/year |
| NO2 | | lb/hour | | tons/year |
| CO | | lb/hr | | tons/year |
| HC | | lb/hr | | tons/year |
| 5. PSD Comment: | | | | |

EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [X] Attached, Document ID: _____ [] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [] Not Applicable |

Emissions Unit Information Section 2 of 14 .

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.3

**7' X 20'
TRIPLE DECK
SCREENER**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Description and Status

| | | |
|--|--|---|
| 1. Description of Emissions Unit Addressed in This Section: Cedarapids, Inc. - Triple Deck Screener (7 x 20'). | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: Portable Reclaimed Asphalt and Concrete Aggregate Processing Unit - 7 x 20' triple deck screening unit. Manufacturer: Cedarapids, Inc. Model Number: 7 x 20 | | |
| 9. Generator Nameplate Rating: | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: The triple deck screening deck is located between the primary jaw crusher and secondary impact crusher. This unit is used to separate material into separate sizes and send them to the radial stackers or to the impact (secondary) crusher to be reprocessed (recrushed). | | |

Emissions Unit Control Equipment

A.

1. Description:

The triple deck screening deck is located between the primary jaw crusher and secondary impact crusher. This unit is used to separate material into separate sizes and send them to the radial stackers or to the impact (secondary) crusher to be reprocessed (recrushed). Water spray bars are located at the entrance and top of the vibrating triple deck screener to dampen the processed materials and to control any emissions generated by this process. The material to be crushed is dampened in it's stockpile as to control fugitive emissions throughout the entire process.

2. Control Device or Method Code: 061, 062, 099

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: None |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: 200 ton/hr as reclaimed concrete or asphalt material (**dependent on material characteristics). |
| 4. Maximum Production Rate: 200 ton/hr as processed (crushed) reclaimed concrete or asphalt aggregate material (**dependent on material characteristics). |
| 5. Operating Capacity Comment: The triple deck screening deck is located between the primary jaw crusher and secondary impact crusher. This unit is used to separate material into separate sizes and send them to the radial stackers or to the impact (secondary) crusher to be reprocessed (recrushed). Water spray bars are located at the entrance and top of the vibrating triple deck screener to dampen the processed materials and to control any emissions generated by this process. In addition, the material that is to be crushed is also dampened in it's stockpile as to control emissions throughout the process as well as any fugitives generated by prevailing winds. |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|---------------|-----------------|
| Requested Maximum Operating Schedule: | | |
| | 10 hours/day | 6 days/week |
| | 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 3 of 14 :

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| |
|---|
| 62-212.200(56) FAC |
| 62-296.800 FAC |
| 40 CFR 60, Subpart 000 |
| 62-296.310 (2) FAC |
| 62-297 FAC |
| 62-297.340 FAC |
| 62-210.350 FAC |
| Chapter 84-446, Section 3(12) FS |
| 62-296.320 FAC |
| 62-296.310(3) FAC |
| 40 CFR 60.11 (d) |
| 62-4 FAC |
| 62-210 |
| |
| |
| |
| |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: Cedarapids, Inc. - Triple Deck Screener 7' x 20' |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: Not Applicable |
| 7. Exit Diameter: |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 3 of 14

| |
|---|
| 10. Percent Water Vapor: ~ 6% moisture |
| 11. Maximum Dry Standard Flow Rate: NA dscfm |
| 12. Nonstack Emission Point Height: ~ 10 feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Emissions Point will be fugitive only, if any emissions are generated at all. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|--|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Material Handling Process – Cedarapids, Inc. – 7 x 20' triple deck screener | |
| 2. Source Classification Code (SCC): 14 | |
| 3. SCC Units: tons processed per hour | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: NA | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 3 of 14

| | |
|--|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): | |
| | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |
| | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

| | | |
|--|-------------------|--------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: 90% | | |
| 3. Primary Control Device Code: 061, 062, and 099 | | |
| 4. Secondary Control Device Code: NA | | |
| 5. Potential Emissions: | 0.42 lb/hr | 0.66 ton/yr |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.0021 lbs/ton Reference: AP-42, Table 3.3-1 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: PM10_{yearly} = [(200 ton/hr)(3120 hr/yr)(0.0021 lb/ton)] / 2000 lb/ton = 0.66 ton/yr PM10_{hour} = (200 ton/hr)(0.0021 lb/ton) = 0.42 lb/hr | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

Emissions Unit Information Section 3 of 14

Allowable Emissions

| |
|---|
| 1. Basis for Allowable Emissions Code: This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: 10 % Opacity |
| 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: Annual EPA Method 9 Compliance Testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field

1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|---|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 Visible Emissions Compliance Testing. |
| 5. Visible Emissions Comment: | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 3 of 14

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:

| | | | |
|-----|------------------------------|------------------------------|--|
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |

4. Baseline Emissions: (for diesel generator only)

| | | |
|----|--------------|----------------|
| PM | 0.42 lb/hour | 0.66 tons/year |
|----|--------------|----------------|

EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable |

Emissions Unit Information Section 3 of 14

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.4

**4' x 30'
FEED CONVEYOR**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 4 of 14.

Emissions Unit Description and Status

| | | |
|--|--|--|
| <p>1. Description of Emissions Unit Addressed in This Section:</p> <p>Cedarapids Feed Conveyor (4x 30') between primary Jaw Crusher and first magnet system to transfer crushed rock from primary crusher through magnetic field onto screening conveyor.</p> | | |
| <p>2. ARMS Identification Number: [] No Corresponding ID [X] Unknown</p> | | |
| <p>3. Emissions Unit Status Code: C</p> | <p>4. Acid Rain Unit? [] Yes [X] No</p> | <p>5. Emissions Unit Major Group SIC Code: 14</p> |
| <p>6. Initial Startup Date (DD-MON-YYYY): Unknown</p> | | |
| <p>7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA</p> | | |
| <p>8. Package Unit: 4' x 30' Feed Conveyor Belt Manufacturer: Cedarapids Inc. Model Number: 4 x 30</p> | | |
| <p>9. Generator Nameplate Rating:</p> | | |
| <p>10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature :</p> | | |
| <p>11. Emissions Unit Comment: If any emissions generated they will be fugitive at drop point between feed conveyor and screen conveyor.</p> | | |

Emissions Unit Control Equipment

A.

| |
|---|
| 1. Description: Cedarapids, Inc. - Feed Conveyor (4x30') used to transfer crushed aggregates through magnetic field onto the screening conveyor. Material is dampened by a water spray bar suppression system at beginning of feed conveyor belt. In addition, material to be crushed is dampened in it's stockpiles before crushing as to control emissions during crushing process. |
| 2. Control Device or Method Code: 061, 062, 099 |

B.

| |
|-----------------------------------|
| 1. Description: |
| 2. Control Device or Method Code: |

C.

| |
|-----------------------------------|
| 1. Description: |
| 2. Control Device or Method Code: |

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: None |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: 200 ton/hr as crushed reclaimed concrete or asphalt material (dependent on material characteristics.) |
| 4. Maximum Production Rate: 200 ton/hr as crushed reclaimed concrete or asphalt material (**dependent on material characteristics.) |
| 5. Operating Capacity Comment: 4' x 30' Feed Conveyor- 200 ton/hr as crushed reclaimed concrete or asphalt material. Material is crushed in primary jaw crusher then transferred to screener to be separated into desired sizes. ***Material characteristics consist of size, moisture and hardness |

Emissions Unit Operating Schedule

| | | | |
|---------------------------------------|---------------|--|-----------------|
| Requested Maximum Operating Schedule: | | | |
| | 10 hours/day | | 6 days/week |
| | 52 weeks/year | | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 4 of 14.

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|---|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: 4' x 30' Feed Conveyor (Transfer Point) |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: ~ 5 feet |
| 7. Exit Diameter: Not Applicable |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 4 of 14.

| |
|---|
| 10. Percent Water Vapor: ~4-6 % |
| 11. Maximum Dry Standard Flow Rate: |
| 12. Nonstack Emission Point Height: ~5 feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Emissions will occur at drop point between feed conveyor and screening conveyor if any at generated at all. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|---|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Material Handling Operations – Cedarapids, Inc. (4' wide x 30' long) conveying system – used to transfer processed crushed aggregates. | |
| 2. Source Classification Code (SCC): 14 | |
| 3. SCC Units: tons/hr material conveyed | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 4 of 14.

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Not Applicable | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

| | | |
|--|-------------------|--------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: 90 % | | |
| 3. Primary Control Device Code: 061, 062, and 099 | | |
| 4. Secondary Control Device Code: NA | | |
| 5. Potential Emissions: | 0.10 lb/hr | 0.15 ton/yr |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.0048 lbs/ton Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: PM10_{yearly} = [(200 ton/hr)(3120 hr/yr)(0.00048 lb/ton)] / 2000 lb/ton = 0.15 ton/yr PM10_{hourly} = (200 ton/hr)(0.00048 lb/ton) = 0.10 lb/hr | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant _____ of _____

| | | | |
|---|---------|-----------|--|
| 1. Pollutant Emitted: | | | |
| 2. Total Percent Efficiency of Control: | | | |
| 3. Primary Control Device Code: | | | |
| 4. Secondary Control Device Code: | | | |
| 5. Potential Emissions: | lb/hour | tons/year | |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | | |
| 8. Emission Factor: Reference: | | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | | |
| 10. Calculation of Emissions: | | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | | |

Allowable Emissions

| |
|---|
| 1. Basis for Allowable Emissions Code: This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: 10 % Opacity |
| 4. Equivalent Allowable Emissions: tons/year |
| 5. Method of Compliance: Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field

1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|---|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 visible emissions compliance testing. |
| 5. Visible Emissions Comment: | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of “major source of air pollution” in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- [] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:

| | | | |
|-----|-------|-------|--------|
| PM | [] C | [] E | [X] No |
| SO2 | [] C | [] E | [X] No |
| NO2 | [] C | [] E | [X] No |

4. Baseline Emissions: (for diesel generator only)

| | | | | |
|-----|-------------|---------|-------------|-----------|
| PM | 0.10 | lb/hour | 0.15 | tons/year |
| SO2 | | lb/hour | | tons/year |
| NO2 | | lb/hour | | tons/year |
| CO | | lb/hr | | tons/year |
| HC | | lb/hr | | tons/year |

5. PSD Comment:

EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 4 of 14.

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>III</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>VI</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable |
| 6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 7. Operation and Maintenance Plan <input checked="" type="checkbox"/> Attached, Document ID: <u>VII</u> <input type="checkbox"/> Not Applicable |
| 8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>V</u> <input type="checkbox"/> Not Applicable |
| 9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.5

4' x 50'

SCREENING CONVEYOR

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 5 of 14.

Emissions Unit Description and Status

| | | |
|---|--------------------------------------|--|
| 1. Description of Emissions Unit Addressed in This Section: Cedarapids Inc., Screening Conveyor (4x50') used to convey crushed aggregates to Cedarapids, Inc. Triple Deck Screener. | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: 4'x 50' Screening Conveyor Belt Manufacturer: Cedarapids, Inc. Model Number: NA | | |
| 9. Generator Nameplate Rating: | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: Cedarapids, Inc. Screening Conveyor (4 x 50'). If any created they will be fugitive and will be generated at drop point to triple deck screener. | | |

Emissions Unit Control Equipment

A.

| |
|--|
| 1. Description: Cedarapids, Inc. Screening Conveyor (4'x 50') used to convey crushed material from feed belt drop point to triple deck screener. Material is dampened by a water suppression system at feed conveyor point and in its stockpile before crushing as to control emissions during crushing and conveying process. |
| 2. Control Device or Method Code: 061, 062, 099 |

B.

| |
|-----------------------------------|
| 1. Description: |
| 2. Control Device or Method Code: |

C.

| |
|-----------------------------------|
| 1. Description: |
| 2. Control Device or Method Code: |

Emissions Unit Operating Capacity

| |
|---|
| 1. Maximum Heat Input Rate: None |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: 200 ton/hr as crushed reclaimed concrete or asphalt material (**dependent on material characteristics). |
| 4. Maximum Production Rate: 200 ton/hr as crushed reclaimed concrete or asphalt material (**dependent on material characteristics). |
| 6. Operating Capacity Comment: 4' x 50' Screening Conveyor – transfers ~200 ton/hr of crushed aggregates to triple deck screening device. |
| Material characteristics consists of moisture, size and hardness. |

Emissions Unit Operating Schedule

| | |
|---------------------------------------|------------------------|
| Requested Maximum Operating Schedule: | |
| 10 hours/day | 6 days/week |
| 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 5 of 14 .

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|---|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: 4' x 50' Transfer Conveyor (Drop Point @ Triple Deck Screener) |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: 0 feet |
| 7. Exit Diameter: Not Applicable |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 5 of 14 .

10. Percent Water Vapor: **4-6 %**

11. Maximum Dry Standard Flow Rate:

12. Nonstack Emission Point Height: **~12 feet**

13. Emission Point UTM Coordinates:

Zone: **17** East (km): **454.871** North (km): **3167.856**

14. Emission Point Comment:

Emissions Point will be fugitive only, if any at all.

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|---|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Material Handling – Cedarapids, Inc. – 4' wide x 60' long screening conveyor. Used to conveyor crushed aggregates to triple deck screening device. | |
| 2. Source Classification Code (SCC): 1421 | |
| 3. SCC Units: tons of material conveyed per hour | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 5 of 14 .

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Not Applicable | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 **of** 5

| | | |
|--|-------------------|--------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: 90 % | | |
| 3. Primary Control Device Code: 061,062, and 099 | | |
| 4. Secondary Control Device Code: NA | | |
| 5. Potential Emissions: | 0.10 lb/hr | 0.15 ton/yr |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.0048 lbs/ton Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: PM10_{yearly} = [(200 ton/hr)(3120 hr/yr)(0.00048 lb/ton)] / 2000 lb/ton = 0.15 ton/yr PM10_{hourly} = (200 ton/hr)(0.00048 lb/ton) = 0.10 lb/hr | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

Emissions Unit Information Section 5 of 14 .

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant _____ of _____

| | | |
|--|---------|-----------|
| 1. Pollutant Emitted: | | |
| 2. Total Percent Efficiency of Control: | | |
| 3. Primary Control Device Code: | | |
| 4. Secondary Control Device Code: | | |
| 5. Potential Emissions: | lb/hour | tons/year |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u> 0 </u> to <u> 0 </u> tons/year | | |
| 8. Emission Factor: Reference: | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

Allowable Emissions

| |
|---|
| 1. Basis for Allowable Emissions Code: This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: 10 % Opacity |
| 4. Equivalent Allowable Emissions: tons/year |
| 5. Method of Compliance: Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field

1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | | |
|---------------------------------|---|--------------------------------|
| 1. Visible Emissions Subtype: | VE | |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour | |
| 4. Method of Compliance: | <p align="center">Annual EPA Method 9 visible emissions compliance testing.</p> | |
| 5. Visible Emissions Comment: | | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 5 of 14.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

| | | | |
|--|----------------------------|----------------------------|--|
| 3. Increment Consuming/Expanding Code: | | | |
| PM | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| SO2 | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| NO2 | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| 4. Baseline Emissions: (for diesel generator only) | | | |
| PM | lb/hour | tons/year | |
| SO2 | lb/hour | tons/year | |
| NO2 | lb/hour | tons/year | |
| CO | lb/hr | tons/year | |
| HC | lb/hr | tons/year | |
| 5. PSD Comment: | | | |

EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable |

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSION POINT No. 6

**4' x 60'
OVERSIZE BELT**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Description and Status

| | | |
|---|---|--|
| <p>1. Description of Emissions Unit Addressed in This Section:</p> <p>Cedarapids, Inc. - Oversize Belt (4' x 60') utilized to transfer oversize aggregates from Cedarapids, Inc. - Triple Deck Screener to Cedarapids, Inc. - secondary Impact Crushing Unit.</p> | | |
| <p>2. ARMS Identification Number: <input type="checkbox"/> No Corresponding ID <input checked="" type="checkbox"/> Unknown</p> | | |
| <p>3. Emissions Unit Status Code: C</p> | <p>4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> | <p>5. Emissions Unit Major Group SIC Code: 14</p> |
| <p>6. Initial Startup Date (DD-MON-YYYY): Unknown</p> | | |
| <p>7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA</p> | | |
| <p>8. Package Unit: 4' x 60' Oversize Belt Manufacturer: Cedarapids, Inc. Model Number: 4x60</p> | | |
| <p>9. Generator Nameplate Rating:</p> | | |
| <p>10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature :</p> | | |
| <p>11. Emissions Unit Comment: Cedarapids, Inc. - Oversize Belt (4' x 60') utilized to transfer oversize aggregates from Cedarapids, Inc. - Triple Deck Screener to Cedarapids, Inc. - secondary Impact Crushing Unit. If any emissions generated they will be fugitive.</p> | | |

Emissions Unit Control Equipment

A.

| |
|---|
| 1. Description: Cedarapids, Inc. - Oversize Belt (4' x 60') utilized to transfer oversize aggregates from Cedarapids, Inc. - Triple Deck Screener to Cedarapids, Inc. - secondary Impact Crushing Unit. Material is dampened by a water supression system at triple deck screening device. Material is also dampened in it's stockpile before crushing as to control emissions during crushing and conveying processes. |
| 2. Control Device or Method Code: 061, 062, 099 |

B.

| |
|-----------------------------------|
| 1. Description: |
| 2. Control Device or Method Code: |

C.

| |
|-----------------------------------|
| 1. Description: |
| 2. Control Device or Method Code: |

Emissions Unit Operating Capacity

| |
|---|
| 1. Maximum Heat Input Rate: None |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: 200 ton/hr as crushed reclaimed concrete or asphalt material. |
| 4. Maximum Production Rate: 200 ton/hr as crushed reclaimed concrete or asphalt material. |
| 5. Operating Capacity Comment: 4' x 60' Oversize Belt - 200 ton/hr as crushed reclaimed concrete or asphalt material. Oversize Material is transferred from Cedarapids Triple Deck Screener to Cedarapids Impact Crusher. No specific amount of oversized material is sent back to the secondary Impact Crusher, the amount varies at all times. |

Emissions Unit Operating Schedule

| | |
|---------------------------------------|------------------------|
| Requested Maximum Operating Schedule: | |
| 10 hours/day | 6 days/week |
| 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 6 of 14.

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|----------------------------------|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: 4' x 60' Oversize Belt (Drop Point from Screener to belt) |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: 0 feet |
| 7. Exit Diameter: Not Applicable |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 6 of 14 .

| |
|--|
| 10. Percent Water Vapor: 4-6 % |
| 11. Maximum Dry Standard Flow Rate: |
| 12. Nonstack Emission Point Height: ~ 5 feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Emissions Point will be fugitive only, if any at all. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|--|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Material Handling - Cedarapids, Inc. - Oversize Belt (4' x 60') utilized to transfer oversize aggregates from Cedarapids, Inc. - Triple Deck Screener to Cedarapids, Inc. - secondary Impact Crushing Unit. | |
| 2. Source Classification Code (SCC): 1421 | |
| 3. SCC Units: tons of material conveyed | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 6 of 14.

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Not Applicable | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 **of** 5

| | | |
|---|-------------------|--------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: 90 % | | |
| 3. Primary Control Device Code: 061, 062, and 099 | | |
| 4. Secondary Control Device Code: NA | | |
| 5. Potential Emissions: | 0.10 lb/hr | 0.15 ton/yr |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.00048 lbs/ton Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: $\text{PM10}_{\text{yearly}} = [(200 \text{ ton/hr})(3120 \text{ hr/yr})(0.00048 \text{ lb/ton})] / 2000 \text{ lb/ton} = 0.15 \text{ ton/yr}$ $\text{PM10}_{\text{hourly}} = (200 \text{ ton/hr})(0.00048 \text{ lb/ton}) = 0.10 \text{ lb/hr}$ | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant _____ of _____

| | | | |
|---|---------|-----------|--|
| 1. Pollutant Emitted: | | | |
| 2. Total Percent Efficiency of Control: | | | |
| 3. Primary Control Device Code: | | | |
| 4. Secondary Control Device Code: | | | |
| 5. Potential Emissions: | lb/hour | tons/year | |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | | |
| 8. Emission Factor: Reference: | | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | | |
| 10. Calculation of Emissions: | | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | | |

Allowable Emissions

| | |
|--|---|
| 1. Basis for Allowable Emissions Code: | This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: | Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: | 10 % Opacity |
| 4. Equivalent Allowable Emissions: | tons/year |
| 5. Method of Compliance: | Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | |

| | | |
|--|-------|-----------|
| 1. Basis for Allowable Emissions Code | | |
| 2. Future Effective Date of Allowable Emissions: | | |
| 3. Requested Allowable Emissions and Units: | | |
| 4. Equivalent Allowable Emissions: | lb/hr | tons/year |
| 5. Method of Compliance: | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | | |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field

1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | | |
|---------------------------------|---|--------------------------------|
| 1. Visible Emissions Subtype: | VE | |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour | |
| 4. Method of Compliance: | <p style="text-align: center;">Annual EPA Method 9 visible emissions compliance testing.</p> | |
| 5. Visible Emissions Comment: | | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 6 of 14.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:

| | | | |
|-----|------------------------------|------------------------------|--|
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |

4. Baseline Emissions: (for diesel generator only)

| | | |
|-----|---------|-----------|
| PM | lb/hour | tons/year |
| SO2 | lb/hour | tons/year |
| NO2 | lb/hour | tons/year |
| CO | lb/hr | tons/year |
| HC | lb/hr | tons/year |

5. PSD Comment:

EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable |

Additional Supplemental Requirements for Category I Applications Only

| |
|---|
| 10. Alternative Methods of Operation [] Attached, Document ID: _____ [X] Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) [] Attached, Document ID: _____ [X] Not Applicable |
| 12. Enhanced Monitoring Plan [] Attached, Document ID: _____ [X] Not Applicable |
| 13. Identification of Additional Applicable Requirements [] Attached, Document ID: _____ [X] Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) [] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [X] Not Applicable |

EMISSIONS POINT No.7

4' x 65'
MATERIAL CONVEYOR

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Description and Status

| | | |
|---|--|--|
| <p>1. Description of Emissions Unit Addressed in This Section:</p> <p>Cedarapids, Inc. - Material Conveyor (4 x 65') Utilized to convey crushed aggregates Cedarapids, Inc. - Secondary Impact Crusher back to Cedarapids Triple Deck Screener.</p> | | |
| <p>2. ARMS Identification Number: [] No Corresponding ID [X] Unknown</p> | | |
| <p>3. Emissions Unit Status Code: C</p> | <p>4. Acid Rain Unit? [] Yes [X] No</p> | <p>5. Emissions Unit Major Group SIC Code: 14</p> |
| <p>6. Initial Startup Date (DD-MON-YYYY): Unknown</p> | | |
| <p>7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA</p> | | |
| <p>8. Package Unit: 4' x 65' Material Conveyor Manufacturer: Cedarapids, Inc. Model Number: 4x65</p> | | |
| <p>9. Generator Nameplate Rating:</p> | | |
| <p>10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature :</p> | | |
| <p>11. Emissions Unit Comment: Cedarapids, Inc. - Material Conveyor (4 x 65') Utilized to convey crushed aggregates Cedarapids, Inc. - Secondary Impact Crusher back to Cedarapids Triple Deck Screener. Any emissions generated during this process will be fugitive.</p> | | |

Emissions Unit Control Equipment

A.

| |
|--|
| 1. Description: Cedarapids, Inc. - Material Conveyor (4 x 65') Utilized to convey crushed aggregates Cedarapids, Inc. - Secondary Impact Crusher back to Cedarapids Triple Deck Screener. Material is dampened by a water suppression system as it enters the secondary impact crusher thus making material damp as it travels back to triple deck screener where it is again dampened. Uncrushed material is also dampened in its stockpile as to control any emissions generated through the entire crushing, screening and conveying process. |
| 2. Control Device or Method Code: 061, 062, 099 |

B.

| |
|-----------------------------------|
| 1. Description: |
| 2. Control Device or Method Code: |

C.

| |
|-----------------------------------|
| 1. Description: |
| 2. Control Device or Method Code: |

Emissions Unit Operating Capacity

| |
|---|
| 1. Maximum Heat Input Rate: None |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: ~ 200 ton/hr as crushed reclaimed concrete or asphalt material (***dependent on material characteristics). |
| 4. Maximum Production Rate: ~ 200 ton/hr as crushed reclaimed concrete or asphalt material. |
| 5. Operating Capacity Comment: *** Material characteristics consist of moisture, size and hardness. |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|----------------------|------------------------|
| Requested Maximum Operating Schedule: | | |
| | 10 hours/day | 6 days/week |
| | 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 7 of 14 .

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|---|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: 4' x 65' Material Conveyor (Drop Point exit from secondary crusher) |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: ~ 0 feet |
| 7. Exit Diameter: Not Applicable |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 7 of 14 .

10. Percent Water Vapor:

11. Maximum Dry Standard Flow Rate:

12. Nonstack Emission Point Height: ~5 feet

13. Emission Point UTM Coordinates:

Zone: 17 East (km): 454.871 North (km): 3167.856

14. Emission Point Comment:

Emissions Point will be fugitive only, if any at all.

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|--|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Material Handling - Cedarapids, Inc. - Material Conveyor (4 x 65') Utilized to convey crushed aggregates Cedarapids, Inc. – Secondary Impact Crusher back to Cedarapids Triple Deck Screener. | |
| 2. Source Classification Code (SCC): 1421 | |
| 3. SCC Units: tons of material conveyed per hour | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 7 of 14 .

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Not Applicable | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 **of** 5

| | | |
|---|-------------------|--------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: 90 % | | |
| 3. Primary Control Device Code: 061, 062, and 099 | | |
| 4. Secondary Control Device Code: NA | | |
| 5. Potential Emissions: | 0.10 lb/hr | 0.15 ton/yr |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.00048 lbs/ton Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: $\text{PM10}_{\text{yearly}} = [(200 \text{ ton/hr})(3120 \text{ hr/yr})(0.00048 \text{ lb/ton})] / 2000 \text{ lb/ton} = 0.15 \text{ ton/yr}$ $\text{PM10}_{\text{hourly}} = (200 \text{ ton/hr})(0.00048 \text{ lb/ton}) = 0.10 \text{ lb/hr}$ | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant _____ of _____

| | | | |
|---|---------|-----------|--|
| 1. Pollutant Emitted: | | | |
| 2. Total Percent Efficiency of Control: | | | |
| 3. Primary Control Device Code: | | | |
| 4. Secondary Control Device Code: | | | |
| 5. Potential Emissions: | lb/hour | tons/year | |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | | |
| 8. Emission Factor: Reference: | | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | | |
| 10. Calculation of Emissions: | | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | | |

Allowable Emissions

| |
|---|
| 1. Basis for Allowable Emissions Code: This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: 10 % Opacity |
| 4. Equivalent Allowable Emissions: tons/year |
| 5. Method of Compliance: Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field

1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | | |
|---------------------------------|---|--------------------------------|
| 1. Visible Emissions Subtype: | VE | |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour | |
| 4. Method of Compliance: | <p align="center">Annual EPA Method 9 visible emissions compliance testing.</p> | |
| 5. Visible Emissions Comment: | | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐ The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

| | | | |
|--|----------------------------|----------------------------|--|
| 3. Increment Consuming/Expanding Code: | | | |
| PM | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| SO2 | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| NO2 | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| 4. Baseline Emissions: (for diesel generator only) | | | |
| PM | lb/hour | | tons/year |
| SO2 | lb/hour | | tons/year |
| NO2 | lb/hour | | tons/year |
| CO | lb/hr | | tons/year |
| HC | lb/hr | | tons/year |
| 5. PSD Comment: | | | |

EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable |

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No. 8

**4' x 90'
PORTABLE RADIAL
STACKING BELT**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 8 of 14

Emissions Unit Description and Status

| | | |
|--|--------------------------------------|--|
| 1. Description of Emissions Unit Addressed in This Section: Cerdarapids, Inc. - 4' x 90' Portable Radial Stacking Belt (Transfer Belt) - used to convey or stack finished aggregate in stockpiles or in trucks. | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: 4' x 90' Portable Radial Stacking Belt (Transfer Point) Manufacturer: Ceadarpids, Inc. Model Number: 4x90 | | |
| 9. Generator Nameplate Rating: NA | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: 4' x 90' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System several points throughout the crushing, screening and conveying system. In addition, all uncrushed material stockpiles are dampened as to control emissions in any of the above mentioned processes. | | |

Emissions Unit Control Equipment

A.

1. Description:

4' x 90' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System several points throughout the crushing, screening and conveying system. In addition, all uncrushed material stockpiles are dampened as to control emissions in any of the above mentioned processes.

2. Control Device or Method Code: **061, 062 and 099**

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Information Section 8 of 14

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: NONE |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: ~ 200 ton/hr as crushed reclaimed concrete or asphalt material (dependent on material characteristics) |
| 4. Maximum Production Rate: ~ 200 ton/hr as crushed reclaimed concrete or asphalt material (dependent on material characteristics). |
| 5. Operating Capacity Comment: 4' x 90' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System at triple deck screening device. A known amount of material is undeterminable from this belt as it carries one size of the aggregates that are separated at the triple deck screening device. |

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:

10 hours/day

6 days/week

52 weeks/year

3120 hours/year

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 8 of 14

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|---|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: 4' x 90' Portable Radial Stacking Belt (Drop Point at belt end to stockpile) |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: NOT APPLICABLE |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: NOT APPLICABLE |
| 7. Exit Diameter: |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 8 of 14

| |
|---|
| 10. Percent Water Vapor: 4-6% |
| 11. Maximum Dry Standard Flow Rate: |
| 12. Nonstack Emission Point Height: variable feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Emissions Point will be fugitive only, if any emissions are generated at all. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|--|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): | |
| Material Handling - 4' x 90' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System at triple deck screening device. A known amount of material is undeterminable from this belt as it carries one size of the aggregates that are separated at the triple deck screening device. | |
| 2. Source Classification Code (SCC): 1421 | |
| 3. SCC Units: tons of material conveyed | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 8 of 14

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): NOT APPLICABLE | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

| |
|--|
| 1. Pollutant Emitted: PM10, TSP |
| 2. Total Percent Efficiency of Control: 90 % |
| 3. Primary Control Device Code: 061, 062 and 099 |
| 4. Secondary Control Device Code: NA |
| 5. Potential Emissions: 0.10 lb/ton 0.15 ton/yr |
| 6. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year |
| 8. Emission Factor: 0.00048 lbs/ton Reference: AP-42 |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| 10. Calculation of Emissions: PM10_{yearly} = [(200 ton/hr)(3120 hr/yr)(0.00048 lb/ton)] / 2000 lb/ton = 0.15 ton/yr PM10_{hourly} = (200 ton/hr)(0.00048 lb/ton) = 0.10 lb/hr |
| 11. Pollutant Potential/Estimated Emissions Comment: |

Emissions Unit Information Section 8 of 14**E. POLLUTANT INFORMATION**

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant _____ of _____

| | | | |
|--|---------|-----------|--|
| 1. Pollutant Emitted: | | | |
| 2. Total Percent Efficiency of Control: | | | |
| 3. Primary Control Device Code: | | | |
| 4. Secondary Control Device Code: | | | |
| 5. Potential Emissions: | lb/hour | tons/year | |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u> 0 </u> to <u> 0 </u> tons/year | | | |
| 8. Emission Factor: Reference: | | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | | |
| 10. Calculation of Emissions: | | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | | |

Emissions Unit Information Section 8 of 14

Allowable Emissions

| |
|---|
| 1. Basis for Allowable Emissions Code: This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: 10 % Opacity |
| 4. Equivalent Allowable Emissions: tons/year |
| 5. Method of Compliance: Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

Emissions Unit Information Section 8 of 14

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|---|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 visible emission compliance testing. |
| 5. Visible Emissions Comment: | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 8 of 14

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐ The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:

| | | | |
|-----|----------------------------|----------------------------|--|
| PM | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| SO2 | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| NO2 | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |

4. Baseline Emissions:

| | | |
|-----|---------|-----------|
| PM | lb/hour | tons/year |
| SO2 | lb/hour | tons/year |
| NO2 | lb/hour | tons/year |

5. PSD Comment:

Emissions Unit Information Section 8 of 14

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>III</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>VI</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable |
| 6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 7. Operation and Maintenance Plan <input checked="" type="checkbox"/> Attached, Document ID: <u>VII</u> <input type="checkbox"/> Not Applicable |
| 8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>V</u> <input checked="" type="checkbox"/> Not Applicable |
| 9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.9

**4' x 80'
PORTABLE RADIAL
STACKING BELT**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 9 of 14

Emissions Unit Description and Status

| | | |
|--|---|---|
| 1. Description of Emissions Unit Addressed in This Section: Cedarapids, Inc - 4' x 80' Portable Radial Stacking Belt (Transfer Belt) - used to convey or stack finished material in stockpiles or in trucks. | | |
| 2. ARMS Identification Number: <input type="checkbox"/> No Corresponding ID <input checked="" type="checkbox"/> Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: 4' x 80' Portable Radial Stacking Belt (Transfer Point) Manufacturer: Cedarapids Inc. Model Number: 4x80 | | |
| 9. Generator Nameplate Rating: NA | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: 4' x 80' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System at triple deck screening device. All uncrushed material is dampened in its stockpile as to control emissions in the conveying, screening and crushing process. | | |

Emissions Unit Control Equipment

A.

1. Description:

4' x 80' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System at triple deck screening device. All uncrushed material is dampened in its stockpile as to control emissions in the conveying, screening and crushing process.

2. Control Device or Method Code: **061, 062 and 099**

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Information Section 9 of 14

Emissions Unit Operating Capacity

| |
|---|
| 1. Maximum Heat Input Rate: NONE |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: ~200 ton/hr as crushed reclaimed concrete or asphalt material (**dependent on material characteristics) |
| 4. Maximum Production Rate: 200 ton/hr as crushed reclaimed concrete or asphalt material (dependent on material characteristics) |
| 5. Operating Capacity Comment: *** Material characteristics consist of size, moisture and hardness. |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|---------------|-----------------|
| Requested Maximum Operating Schedule: | | |
| | 10 hours/day | 6 days/week |
| | 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 9 of 14

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|----------------------------------|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: 4' x 80' Portable Radial Stacking Belt (Drop Point @ end of belt to stockpile) |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: NOT APPLICABLE |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: NOT APPLICABLE |
| 7. Exit Diameter: |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 9 of 14

| |
|---|
| 10. Percent Water Vapor: 4-6% |
| 11. Maximum Dry Standard Flow Rate: |
| 12. Nonstack Emission Point Height: variable feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Emissions Point will be fugitive only, if any emissions are generated at all. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|---|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): | |
| Material Handling - 4' x 80' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System at triple deck screening device. All uncrushed material is dampened in its stockpile as to control emissions in the conveying, screening and crushing process. | |
| 2. Source Classification Code (SCC): 1421 | |
| 3. SCC Units: tons of material conveyed | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 9 of 14

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): NOT APPLICABLE | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

| |
|--|
| 1. Pollutant Emitted: PM10 |
| 2. Total Percent Efficiency of Control: 90 % |
| 3. Primary Control Device Code: 061, 062 and 099 |
| 4. Secondary Control Device Code: NA |
| 5. Potential Emissions: 0.10 lb/ton 0.15 ton/yr |
| 6. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year |
| 8. Emission Factor: 0.00048 lbs/ton Reference: AP-42 |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| 10. Calculation of Emissions: $PM_{10\text{yearly}} = [(200 \text{ ton/hr})(3120 \text{ hr/yr})(0.00048 \text{ lb/ton})] / 2000 \text{ lb/ton} = 0.15 \text{ ton/yr}$ $PM_{10\text{hourly}} = (200 \text{ ton/hr})(0.00048 \text{ lb/ton}) = 0.10 \text{ lb/hr}$ |
| 11. Pollutant Potential/Estimated Emissions Comment: |

Emissions Unit Information Section 9 of 14**E. POLLUTANT INFORMATION**

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant _____ of _____

| | | |
|--|---------|-----------|
| 1. Pollutant Emitted: | | |
| 2. Total Percent Efficiency of Control: | | |
| 3. Primary Control Device Code: | | |
| 4. Secondary Control Device Code: | | |
| 5. Potential Emissions: | lb/hour | tons/year |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u> 0 </u> to <u> 0 </u> tons/year | | |
| 8. Emission Factor: Reference: | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

Emissions Unit Information Section 9 of 14

Allowable Emissions

| | |
|--|---|
| 1. Basis for Allowable Emissions Code: | This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: | Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: | 10 % Opacity |
| 4. Equivalent Allowable Emissions: | tons/year |
| 5. Method of Compliance: | Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | |

| | | |
|--|-------|-----------|
| 1. Basis for Allowable Emissions Code | | |
| 2. Future Effective Date of Allowable Emissions: | | |
| 3. Requested Allowable Emissions and Units: | | |
| 4. Equivalent Allowable Emissions: | lb/hr | tons/year |
| 5. Method of Compliance: | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | | |

Emissions Unit Information Section 9 of 14

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|---|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 visible emission compliance testing. |
| 5. Visible Emissions Comment: | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 9 of 14

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:

| | | | |
|-----|------------------------------|------------------------------|--|
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |

4. Baseline Emissions:

| | | |
|-----|---------|-----------|
| PM | lb/hour | tons/year |
| SO2 | lb/hour | tons/year |
| NO2 | lb/hour | tons/year |

5. PSD Comment:

Emissions Unit Information Section 9 of 14

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|---|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [X] Attached, Document ID: _____ [] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [X] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [] Not Applicable |

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.10

4' x 60'
PORTABLE RADIAL
STACKING BELT

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ [X] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 10 of 14

Emissions Unit Description and Status

| | | |
|--|--|---|
| 1. Description of Emissions Unit Addressed in This Section: 4' x 60' Portable Radial Stacking Belt (Transfer Belt) - used to convey or stack finished material in stockpiles or into trucks. | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 7. Package Unit: 4' x 60' Portable Radial Stacking Belt Manufacturer: Cedarapids, Inc. Model Number: 4x60 | | |
| 9. Generator Nameplate Rating: NA | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: 4' x 60' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System at triple deck screening device. All uncrushed material is dampened in its stockpile as to control emissions in the conveying, screening and crushing process. | | |

Emissions Unit Control Equipment

A.

1. Description:

4' x 60' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System at triple deck screening device. All uncrushed material is dampened in its stockpile as to control emissions in the conveying, screening and crushing process.

2. Control Device or Method Code: **061, 062 and 099**

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Information Section 10 of 14

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: NONE |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: ~200 ton/hr as crushed reclaimed concrete or asphalt material (** dependent of material characteristics) |
| 4. Maximum Production Rate: 200 ton/hr as crushed reclaimed concrete or asphalt material (dependent on material characteristics) |
| 5. Operating Capacity Comment: *** Material characteristics dependent on moisture, size and hardness. |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|----------------------|------------------------|
| Requested Maximum Operating Schedule: | | |
| | 10 hours/day | 6 days/week |
| | 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 10 of 14

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|---|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: 4' x 60' Portable Radial Stacking Belt (Drop Point @ end of belt to stockpile) |
| 2. Emission Point Type Code: [] 1 [] 2 [] 3 [X] 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: NOT APPLICABLE |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: [] D [X] F [] H [] P [] R [] V [] W |
| 6. Stack Height: NOT APPLICABLE |
| 7. Exit Diameter: |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 10 of 14

| |
|---|
| 10. Percent Water Vapor: 4-6% |
| 11. Maximum Dry Standard Flow Rate: |
| 12. Nonstack Emission Point Height: variable feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Emissions Point will be fugitive only, if any emissions are generated at all. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|---|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): | |
| Material Handling - 4' x 80' Portable Radial Stacking Belt - utilized to convey or stack finished product into stockpiles or trucks. Material dampened by a Water Spray Dust Suppression System at triple deck screening device. All uncrushed material is dampened in its stockpile as to control emissions in the conveying, screening and crushing process. | |
| 2. Source Classification Code (SCC): 1421 | |
| 3. SCC Units: tons of material conveyed | |
| 4. Maximum Hourly Rate: 200 ton/hr | 5. Maximum Annual Rate: 624,000 ton/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 10 of 14

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): NOT APPLICABLE | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 10 of 14**E. POLLUTANT INFORMATION**

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

| |
|---|
| 1. Pollutant Emitted: PM10, TSP |
| 2. Total Percent Efficiency of Control: 90 % |
| 3. Primary Control Device Code: 061, 062 and 099 |
| 4. Secondary Control Device Code: NA |
| 5. Potential Emissions: 0.10 lb/ton 0.15 ton/yr |
| 6. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year |
| 8. Emission Factor: 0.00048 lbs/ton Reference: AP-42 |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| 10. Calculation of Emissions: $\text{PM10}_{\text{yearly}} = [(200 \text{ ton/hr})(3120 \text{ hr/yr})(0.00048 \text{ lb/ton})] / 2000 \text{ lb/ton} = 0.15 \text{ ton/yr}$ $\text{PM10}_{\text{hourly}} = (200 \text{ ton/hr})(0.00048 \text{ lb/ton}) = 0.10 \text{ lb/hr}$ |
| 11. Pollutant Potential/Estimated Emissions Comment: |

Emissions Unit Information Section 10 of 14**E. POLLUTANT INFORMATION**

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant _____ of _____

| | | | |
|--|---------|-----------|--|
| 1. Pollutant Emitted: | | | |
| 2. Total Percent Efficiency of Control: | | | |
| 3. Primary Control Device Code: | | | |
| 4. Secondary Control Device Code: | | | |
| 5. Potential Emissions: | lb/hour | tons/year | |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u> 0 </u> to <u> 0 </u> tons/year | | | |
| 8. Emission Factor: Reference: | | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | | |
| 10. Calculation of Emissions: | | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | | |

Allowable Emissions

| | |
|--|---|
| 1. Basis for Allowable Emissions Code: | This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: | Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: | 10 % Opacity |
| 4. Equivalent Allowable Emissions: | tons/year |
| 5. Method of Compliance: | Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | |

| | | |
|--|-------|-----------|
| 1. Basis for Allowable Emissions Code | | |
| 2. Future Effective Date of Allowable Emissions: | | |
| 3. Requested Allowable Emissions and Units: | | |
| 4. Equivalent Allowable Emissions: | lb/hr | tons/year |
| 5. Method of Compliance: | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | | |

Emissions Unit Information Section 10 of 14

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|---|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 visible emission compliance testing. |
| 5. Visible Emissions Comment: | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 10 of 14

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:

| | | | |
|-----|------------------------------|------------------------------|--|
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |

4. Baseline Emissions:

| | | |
|-----|---------|-----------|
| PM | lb/hour | tons/year |
| SO2 | lb/hour | tons/year |
| NO2 | lb/hour | tons/year |

5. PSD Comment:

Emissions Unit Information Section 10 of 14

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section.

Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|---|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [X] Attached, Document ID: _____ [] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [X] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [] Not Applicable |

Emissions Unit Information Section 10 of 14

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.11

**CATERPILLAR MODEL 3412
GENERATOR SET**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☒ [X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 11 of 14

Emissions Unit Description and Status

| | | |
|---|--------------------------------------|---|
| 1. Description of Emissions Unit Addressed in This Section: Caterpillar Machinery Corporation - Model 3412, 800 kW Generator Set fired on No.2 virgin diesel fuel with a maximum sulfur limit of 0.5% by weight | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: Generator Set Manufacturer: Caterpillar Machinery Corporation Model Number: 3412 | | |
| 9. Generator Nameplate Rating: 800 kW | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: Caterpillar Machinery Corporation – Generator Set used to supply power to all components of this aggregate processing facility. Generator Set fired on No.2 virgin diesel fuel oil with a maximum sulfur content of 0.5 % by weight, ~ 138,000 BTU/gal and a maximum fuel consumption of ~ 30 gallons per hour. | | |

Emissions Unit Control Equipment

A.

1. Description:

UNCONTROLLED

2. Control Device or Method Code:

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Information Section 11 of 14

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: 6.21 MMBTU/hr |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: 30 gal/hr No.2 Fuel oil max. |
| 4. Maximum Production Rate: 30 gal/hr No.2 virgin diesel fuel oil |
| 5. Operating Capacity Comment: Caterpillar Machinery Corporation -Generator Set used to supply power to entire crushing facility. Generator Set fired on "off-road" virgin No.2 Fuel Oil with a maximum sulfur content of 0.5 % by weight, ~138,000 BTU/gal and a maximum fuel consumption of 30 gallons per hour. |

Emissions Unit Operating Schedule

| | |
|---------------------------------------|------------------------|
| Requested Maximum Operating Schedule: | |
| 10 hours/day | 6 days/week |
| 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 62-296.310(2) FAC rules and regulations.

Emissions Unit Information Section 11 of 14

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|---|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 FAC | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: Caterpillar Machinery Corporation - Diesel Fired Generator - Set |
| 2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: NOT APPLICABLE |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: ~ 15' |
| 7. Exit Diameter: ~ 8" |
| 8. Exit Temperature: NA |
| 9. Actual Volumetric Flow Rate: 5265 cfm |

Emissions Unit Information Section 11 of 14

| |
|--|
| 10. Percent Water Vapor: unknown |
| 11. Maximum Dry Standard Flow Rate: unknown |
| 12. Nonstack Emission Point Height: NA feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Caterpillar Machinery Corporation -Generator Set used to supply power to entire crushing facility. Generator Set fired on virgin "off-road" No.2 Fuel Oil with a maximum sulfur content of 0.5 % by weight, ~ 138,000 BTU/gal and a maximum fuel consumption of 30 gallons per hour. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|---|---|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Generator Set - No. 2 Virgin Diesel Fuel | |
| 2. Source Classification Code (SCC): 20200401 | |
| 3. SCC Units: 1,000 gallons burned | |
| 4. Maximum Hourly Rate: 30.0 gal/hr | 5. Maximum Annual Rate: ~ 93,600 gal/yr |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: 0.50 % | 8. Maximum Percent Ash: Neg. |
| 9. Million Btu per SCC Unit: 138.0 MMBTU/SCC Unit | |
| 10. Segment Comment: | |

Emissions Unit Information Section 11 of 14

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):

NOT APPLICABLE

2. Source Classification Code (SCC):

3. SCC Units:

4. Maximum Hourly Rate:

5. Maximum Annual Rate:

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:

8. Maximum Percent Ash:

9. Million Btu per SCC Unit:

10. Segment Comment:

Emissions Unit Information Section 11 of 14

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 5

| |
|--|
| 1. Pollutant Emitted: PM10 |
| 2. Total Percent Efficiency of Control: NONE |
| 3. Primary Control Device Code: NA |
| 4. Secondary Control Device Code: NA |
| 5. Potential Emissions: 1.28 lb/hr or 2.00 ton/hr |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year |
| 8. Emission Factor: 0.31 lb/MMBTU Reference: AP-42 |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| 10. Calculation of Emissions: $\text{PM10} = (30 \text{ gal/hr fuel use})(138,000 \text{ BTU/gal}) = 4.14 \text{ MMBTU/hr}$ $(4.14 \text{ MMBTU/hr})(0.31 \text{ lb/MMBTU}) = 1.28 \text{ lb/hr}$ $(1.28 \text{ lb/hr})(3120 \text{ hrs/yr}) / 2000 \text{ lb/ton} = 2.00 \text{ ton/yr}$ |
| 11. Pollutant Potential/Estimated Emissions Comment: |

Emissions Unit Information Section 11 of 14

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 2 of 5

| | | |
|--|----------------------|------------------------|
| 1. Pollutant Emitted: NOx | | |
| 2. Total Percent Efficiency of Control: NONE | | |
| 3. Primary Control Device Code: NONE | | |
| 4. Secondary Control Device Code: | | |
| 5. Potential Emissions: | 18.26 lb/hour | 28.49 tons/year |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 4.41 lb/MMBTU Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: NOx = (30 gal/hr) (138,000 BTU/gal) = 4.14 MMBTU/gal (4.14 MMBTU/hr) (4.41 lb/MMBTU) = 18.26 lb/hr (18.26 lb/hr)(3120 hrs/yr) / 2000 lb/ton = 28.49 ton/yr | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

Emissions Unit Information Section 11 of 14**E. POLLUTANT INFORMATION**

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 3 of 5

| | | |
|---|---------------------|-----------------------|
| 1. Pollutant Emitted: CO | | |
| 2. Total Percent Efficiency of Control: NONE | | |
| 3. Primary Control Device Code: NONE | | |
| 4. Secondary Control Device Code: | | |
| 5. Potential Emissions: | 3.93 lb/hour | 6.14 tons/year |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.95 lb/MMBTU Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: CO = (30 gal/hr) (138,000 BTU/gal) = 4.14 MMBTU/gal (4.14 MMBTU/hr) (0.95 lb/MMBTU) = 3.93 lb/hr (3.93 lb/hr)(3120 hrs/yr) / 2000 lb/ton = 6.14 ton/yr | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

Emissions Unit Information Section 11 of 14**E. POLLUTANT INFORMATION**

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 4 of 5

| | | |
|---|---------------------|-----------------------|
| 1. Pollutant Emitted: SO_x | | |
| 2. Total Percent Efficiency of Control: NONE | | |
| 3. Primary Control Device Code: NONE | | |
| 4. Secondary Control Device Code: | | |
| 5. Potential Emissions: | 1.20 lb/hour | 1.87 tons/year |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.29 lb/MMBTU Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: SO_x = (30 gal/hr) (138,000 BTU/gal) = 4.14 MMBTU/gal (4.14 MMBTU/hr) (0.29 lb/MMBTU) = 1.20 lb/hr (1.20 lb/hr)(3120 hrs/yr) / 2000 lb/ton = 1.87 ton/yr | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 5 **of** 5

| | | |
|--|---------------------|-----------------------|
| 1. Pollutant Emitted: TOC total | | |
| 2. Total Percent Efficiency of Control: NONE | | |
| 3. Primary Control Device Code: NONE | | |
| 4. Secondary Control Device Code: | | |
| 5. Potential Emissions: | 1.49 lb/hour | 2.32 tons/year |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.36 lb/MMBTU Reference: AP-42 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: TOC = (30 gal/hr) (138,000 BTU/gal) = 4.14 MMBTU/gal (4.14 MMBTU/hr) (0.36 lb/MMBTU) = 1.49 lb/hr (1.49 lb/hr)(3120 hrs/yr) / 2000 lb/ton = 2.32 ton/yr | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

Emissions Unit Information Section 11 of 14

Allowable Emissions

| |
|--|
| 1. Basis for Allowable Emissions Code: RULE |
| 2. Future Effective Date of Allowable Emissions: Initial Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: < 20 % Opacity |
| 4. Equivalent Allowable Emissions: tons/year |
| 5. Method of Compliance: Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|--|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: < 20 % Exceptional Conditions: < 20 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 visible emission compliance testing. |
| 5. Visible Emissions Comment: | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

**H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 11 of 14

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

| | | | |
|--|------------------------------|------------------------------|--|
| 3. Increment Consuming/Expanding Code: | | | |
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| 4. Baseline Emissions: | | | |
| PM | lb/hour | tons/year | |
| SO2 | lb/hour | tons/year | |
| NO2 | lb/hour | tons/year | |
| 5. PSD Comment: | | | |
| | | | |

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section.

Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>III</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>VI</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable |
| 6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 7. Operation and Maintenance Plan <input checked="" type="checkbox"/> Attached, Document ID: <u>VII</u> <input type="checkbox"/> Not Applicable |
| 8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>V</u> <input checked="" type="checkbox"/> Not Applicable |
| 9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |

Emissions Unit Information Section 11 of 14

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.12

FUGITIVE EMISSIONS
FROM
UNPAVED/ PAVED HAUL ROADS

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ [] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ [X] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 12 of 14

Emissions Unit Description and Status

| | | |
|--|--------------------------------------|---|
| 1. Description of Emissions Unit Addressed in This Section: Fugitive Emissions from Unpaved / Paved Haul Roads (Worst Case Scenario). | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: Not Applicable Manufacturer: Model Number: | | |
| 9. Generator Nameplate Rating: | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: Fugitive Emissions from Unpaved Haul Roads – emissions based on a worst case scenario. All roads are watered continuously by a water truck. Vehicular traffic speed is posted and enforced at a maximum of 5 m.p.h.. | | |

Emissions Unit Information Section 12 of 14

Emissions Unit Control Equipment

A.

1. Description:

Fugitive Emissions from Unpaved Haul Roads – emissions based on a worst case scenario. All roads are watered continuously by a water truck. Vehicular traffic speed is posted and enforced at a maximum of 5 m.p.h.

2. Control Device or Method Code: **099**

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Information Section 12 of 14**Emissions Unit Operating Capacity**

| |
|--|
| 1. Maximum Heat Input Rate: Not Applicable |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: |
| 4. Maximum Production Rate: |
| 5. Operating Capacity Comment: All emissions are fugitive, if any emissions at all. Fugitive Emissions from Unpaved Sites – emissions based on a worse case scenario. All roads are watered continuously by a water truck. Vehicular traffic speed is posted and enforced at a maximum of 5 m.p.h. |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|----------------------|------------------------|
| Requested Maximum Operating Schedule: | | |
| | 10 hours/day | 6 days/week |
| | 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR Part 60, subsection 000 rules and regulations.

Emissions Unit Information Section 12 of 14

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|---|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 FAC | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: Unpaved/Paved Haul Roads |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: NOT APPLICABLE |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: |
| 7. Exit Diameter: |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 12 of 14

| |
|---|
| 10. Percent Water Vapor: |
| 11. Maximum Dry Standard Flow Rate: |
| 12. Nonstack Emission Point Height: Groundlevel |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Fugitive Emissions from Unpaved and paved Haul Roads – emissions based on a worst case scenario. All roads are watered continuously by a water truck. Vehicular traffic speed is posted and enforced at a maximum of 5 m.p.h. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|--|---|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Material Handling - Fugitive Emissions from Unpaved and paved Haul Roads - emissions based on a worst case scenario. All roads are watered continuously by a water truck. Vehicular traffic speed is posted and enforced at a maximum of 5 m.p.h. | |
| 2. Source Classification Code (SCC): 1421 | |
| 3. SCC Units: Vehicle miles traveled | |
| 4. Maximum Hourly Rate: 0.32 lb/hr | 5. Maximum Annual Rate: 0.50 ton/yr |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: NA | 8. Maximum Percent Ash: NA |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 12 of 14

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): NOT APPLICABLE | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 12 of 14

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

| |
|--|
| 1. Pollutant Emitted: PM10 |
| 2. Total Percent Efficiency of Control: 90 % (AP-42 section 13.2.2-26 reference 18) |
| 3. Primary Control Device Code: 009 |
| 4. Secondary Control Device Code: NA |
| 5. Potential Emissions: without controls : 2.0lb/VMT with controls : 0.2 lb/VMT |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year |
| 8. Emission Factor: 0.2 lb/VMT Reference: AP-42 Section 13.2.1.1 Unpaved Roads |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| 10. Calculation of Emissions: $E = k(5.9)[s/12][S/30][W/3]^{0.7} [w/4]^{0.5} [365-P/365]$ $E = 0.36(5.9)[8.9/12][5/30][31.3/3]^{0.7} [10/4]^{0.5} [365-120/365] = 2.0 \text{ lb/VMT}$ $E = 2.0 \text{ lb/VMT (1-0.90 control efficiency)} = 0.2 \text{ lb/VMT}$ $E_{\text{daily}} = (0.2 \text{ lb/VMT})(16 \text{ VMT/day}) = 3.2 \text{ lb/day}$ $E_{\text{year}} = [(3.2 \text{ lb/day} / 10 \text{ hr/day})] (3120 \text{ hrs/yr}) / 2000 \text{ lb/ton} = 0.50 \text{ ton/yr}$ |
| 11. Pollutant Potential/Estimated Emissions Comment: |

Emissions Unit Information Section 12 of 14

Allowable Emissions

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: | Rule |
| 2. Future Effective Date of Allowable Emissions: | Initial Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: | < 5 % Opacity |
| 4. Equivalent Allowable Emissions: | tons/year |
| 5. Method of Compliance: | Annual EPA Method 9 Compliance testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | |

| | | |
|--|-------|-----------|
| 1. Basis for Allowable Emissions Code | | |
| 2. Future Effective Date of Allowable Emissions: | | |
| 3. Requested Allowable Emissions and Units: | | |
| 4. Equivalent Allowable Emissions: | lb/hr | tons/year |
| 5. Method of Compliance: | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | | |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|--|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: < 5 % Exceptional Conditions: < 5 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 visible emission compliance testing. |
| 5. Visible Emissions Comment: | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

**H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 12 of 14

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

| | | | |
|--|------------------------------|------------------------------|--|
| 3. Increment Consuming/Expanding Code: | | | |
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| 4. Baseline Emissions: | | | |
| PM | lb/hour | tons/year | |
| SO2 | lb/hour | tons/year | |
| NO2 | lb/hour | tons/year | |
| 5. PSD Comment: | | | |
| | | | |

Emissions Unit Information Section 12 of 14

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section.

Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>III</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>VI</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested |
| 5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable |
| 6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 7. Operation and Maintenance Plan <input checked="" type="checkbox"/> Attached, Document ID: <u>VII</u> <input type="checkbox"/> Not Applicable |
| 8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>V</u> <input checked="" type="checkbox"/> Not Applicable |
| 9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |

Emissions Unit Information Section 12 of 14

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part – Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.13

**STOCKPILES AND CONVEYOR
DROPS TO STOCKPILES**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 13 of 14

Emissions Unit Description and Status

| | | |
|---|--------------------------------------|---|
| 1. Description of Emissions Unit Addressed in This Section: Storage Piles & Conveyor Drops. | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: Not Applicable Manufacturer: Model Number: | | |
| 9. Generator Nameplate Rating: | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: Fugitive Emissions from Storage Piles and Drops from conveyors to stockpiles – worst case scenario. All stockpiles are watered continuously by water truck. | | |

Emissions Unit Control Equipment

A.

1. Description:

Fugitive Emissions from Storage Piles and Drops from conveyors to stockpiles – worst case scenario. All stockpiles are watered continuously by water truck.

2. Control Device or Method Code: **099**

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Information Section 13 of 14

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: Not Applicable |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: |
| 4. Maximum Production Rate: |
| 5. Operating Capacity Comment: Fugitive Emissions from Storage Piles and Drops from conveyors to stockpiles – worst case scenario. All stockpiles are watered continuously by water truck. |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|---------------|-----------------|
| Requested Maximum Operating Schedule: | | |
| | 10 hours/day | 6 days/week |
| | 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR Part 60, subsection 000 rules and regulations.

Emissions Unit Information Section 13 of 14

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| | |
|---|--|
| 62-212.200(56) FAC | |
| 62-296.800 FAC | |
| 40 CFR 60, Subpart 000 | |
| 62-296.310 (2) FAC | |
| 62-297 FAC | |
| 62-297.340 FAC | |
| 62-210.350 FAC | |
| Chapter 84-446, Section 3(12) FS | |
| 62-296.320 FAC | |
| 62-296.310(3) FAC | |
| 40 CFR 60.11 (d) | |
| 62-4 FAC | |
| 62-210 FAC | |
| | |
| | |
| | |
| | |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: Storage Piles and Drops from conveyors to storage piles. |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: NOT APPLICABLE |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: |
| 7. Exit Diameter: |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 13 of 14

| |
|---|
| 10. Percent Water Vapor: |
| 11. Maximum Dry Standard Flow Rate: |
| 12. Nonstack Emission Point Height: Groundlevel |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Fugitive Emissions from Storage Piles and Drops from conveyors to stockpiles – worst case scenario. All stockpiles are watered continuously by water truck. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

| | |
|---|--|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Material Handling – Material Storage Stockpiles and Conveyor Drops | |
| 2. Source Classification Code (SCC): UNKNOWN | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: 200 ton/hr and 0.16 lb/hr fugitives | 5. Maximum Annual Rate: 624,000 tpy & 0.26 tpy fugitives |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 13 of 14

| | |
|---|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): NOT APPLICABLE | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |

Emissions Unit Information Section 13 of 14

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

| |
|--|
| 1. Pollutant Emitted: PM10 |
| 2. Total Percent Efficiency of Control: 90 % (AP-42 section 13.2.4.4) |
| 3. Primary Control Device Code: 009 |
| 4. Secondary Control Device Code: NA |
| 5. Potential Emissions: without controls : 1.62 lb/hr with controls : 1.62 lb/day |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year |
| 8. Emission Factor: 0.2 lb/VMT Reference: AP-42 Section 13.2.4.2 Aggregate Handling and Storage Piles. |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| 10. Calculation of Emissions: $E = k (0.0032) [u/5]^{1.3} / [M/2]^{1.4}$ $E = 0.35 (0.0032) [7/5]^{1.3} / [0.7/2]^{1.4} = 0.0081 \text{ lb/ton}$ $E = (200 \text{ ton/hr})(0.0081 \text{ lb/ton}) = 1.62 \text{ lb/hr}$ $E = (1.62 \text{ lb/hr}) (1-0.90 \text{ control efficiency})(10 \text{ hr/day}) = 1.62 \text{ lb/day}$ $E = [(1.62 \text{ lb/day} / 10 \text{ hr/day})] (3120 \text{ hrs/yr}) / 2000 \text{ lb/ton} = 0.26 \text{ ton/yr}$ |
| 11. Pollutant Potential/Estimated Emissions Comment: |

Emissions Unit Information Section 13 of 14

Allowable Emissions

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: | Rule |
| 2. Future Effective Date of Allowable Emissions: | Initial Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: | < 5 % Opacity |
| 4. Equivalent Allowable Emissions: | tons/year |
| 5. Method of Compliance: Annual EPA Method 9 Compliance testing. | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | |

| | | |
|--|-------|-----------|
| 1. Basis for Allowable Emissions Code | | |
| 2. Future Effective Date of Allowable Emissions: | | |
| 3. Requested Allowable Emissions and Units: | | |
| 4. Equivalent Allowable Emissions: | lb/hr | tons/year |
| 5. Method of Compliance: | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): | | |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|--|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: < 5 % Exceptional Conditions: < 5 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 visible emission compliance testing. |
| 5. Visible Emissions Comment: | |

Emissions Unit Information Section 13 of 14

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

I. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 13 of 14

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

| | | | |
|--|----------------------------|----------------------------|--|
| 3. Increment Consuming/Expanding Code: | | | |
| PM | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| SO2 | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| NO2 | <input type="checkbox"/> C | <input type="checkbox"/> E | <input checked="" type="checkbox"/> No |
| 4. Baseline Emissions: | | | |
| PM | lb/hour | tons/year | |
| SO2 | lb/hour | tons/year | |
| NO2 | lb/hour | tons/year | |
| 5. PSD Comment: | | | |
| | | | |

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section.

Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|--|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [X] Attached, Document ID: _____ [] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [X] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [] Not Applicable |

Emissions Unit Information Section 13 of 14

Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

EMISSIONS POINT No.14

**VIBRATING GRIZZLY FEEDER /
RECEIVING HOPPER**

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 14 of 14.

Emissions Unit Description and Status

| | | |
|---|--------------------------------------|---|
| 1. Description of Emissions Unit Addressed in This Section: Cedarapids, Inc. – Grizzly Feeder / Receiving Hopper. | | |
| 2. ARMS Identification Number: [] No Corresponding ID [X] Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? [] Yes [X] No | 5. Emissions Unit Major Group SIC Code: 14 |
| 6. Initial Startup Date (DD-MON-YYYY): Unknown | | |
| 7. Long-term Reserve Shutdown Date (DD-MON-YYYY): NA | | |
| 8. Package Unit: Portable Reclaimed Asphalt and Concrete Aggregate Processing Unit – Grizzly Feeder / Receiving Hopper. Manufacturer: Cedarapids, Inc. Model Number: Unknown | | |
| 9. Generator Nameplate Rating: | | |
| 10. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Temperature : | | |
| 11. Emissions Unit Comment: The Grizzly feeder / receiving hopper is used to receive uncrushed material from a front end loader and vibrate it into the primary crusher. | | |

Emissions Unit Control Equipment

A.

1. Description:

The Grizzly feeder / receiving hopper is used to receive uncrushed material from a front end loader and vibrate it into the primary crusher. Water spray bars are located at the entrance and top of the vibrating feeder to dampen the processed materials and to control any emissions generated by this process. The material to be crushed is dampened in it's stockpile as to control fugitive emissions throughout the entire process.

2. Control Device or Method Code: **061, 062, 099**

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Operating Capacity

| |
|--|
| 1. Maximum Heat Input Rate: None |
| 2. Maximum Incineration Rate: |
| 3. Maximum Process or Throughput Rate: 200 ton/hr as reclaimed concrete or asphalt material (**dependent on material characteristics). |
| 4. Maximum Production Rate: 200 ton/hr as processed (crushed) reclaimed concrete or asphalt aggregate material (**dependent on material characteristics). |
| 5. Operating Capacity Comment: The Grizzly feeder / receiving hopper is used to receive uncrushed material from a front end loader and vibrate it into the primary crusher. Water spray bars are located at the entrance and top of the vibrating feeder to dampen the processed materials and to control any emissions generated by this process. The material to be crushed is dampened in it's stockpile as to control fugitive emissions throughout the entire process. |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|---------------|-----------------|
| Requested Maximum Operating Schedule: | | |
| | 10 hours/day | 6 days/week |
| | 52 weeks/year | 3120 hours/year |

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations.

Emissions Unit Information Section 14 of 14 .

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

| |
|---|
| 62-212.200(56) FAC |
| 62-296.800 FAC |
| 40 CFR 60, Subpart 000 |
| 62-296.310 (2) FAC |
| 62-297 FAC |
| 62-297.340 FAC |
| 62-210.350 FAC |
| Chapter 84-446, Section 3(12) FS |
| 62-296.320 FAC |
| 62-296.310(3) FAC |
| 40 CFR 60.11 (d) |
| 62-4 FAC |
| 62-210 |
| |
| |
| |
| |

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

| |
|---|
| 1. Identification of Point on Plot Plan or Flow Diagram: Cedarapids, Inc. – Vibrating Grizzly Feeder / Receiving Hopper |
| 2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA |
| 5. Discharge Type Code: <input type="checkbox"/> D <input checked="" type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input type="checkbox"/> W |
| 6. Stack Height: Not Applicable |
| 7. Exit Diameter: |
| 8. Exit Temperature: |
| 9. Actual Volumetric Flow Rate: |

Emissions Unit Information Section 14 of 14 .

| |
|---|
| 10. Percent Water Vapor: ~ 6% moisture |
| 11. Maximum Dry Standard Flow Rate: NA dscfm |
| 12. Nonstack Emission Point Height: ~ 15 feet |
| 13. Emission Point UTM Coordinates: Zone: 17 East (km): 454.871 North (km): 3167.856 |
| 14. Emission Point Comment: Emissions Point will be fugitive only, if any emissions are generated at all. |

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

2. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):

Material Handling Process – Cedarapids, Inc. - The Grizzly feeder / receiving hopper is used to receive uncrushed material from a front end loader and vibrate it into the primary crusher. Water spray bars are located at the entrance and top of the vibrating feeder to dampen the processed materials and to control any emissions generated by this process. The material to be crushed is dampened in it's stockpile as to control fugitive emissions throughout the entire process.

2. Source Classification Code (SCC): **14**

3. SCC Units: **tons processed per hour**

4. Maximum Hourly Rate:
200 ton/hr

5. Maximum Annual Rate:
624,000 ton/yr

6. Estimated Annual Activity Factor:

NA

8. Maximum Percent Sulfur:
NA

8. Maximum Percent Ash:

9. Million Btu per SCC Unit:

10. Segment Comment:

Emissions Unit Information Section 14 of 14 .

| | |
|--|-------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): | |
| | |
| 2. Source Classification Code (SCC): | |
| 3. SCC Units: | |
| 4. Maximum Hourly Rate: | 5. Maximum Annual Rate: |
| 6. Estimated Annual Activity Factor: | |
| 7. Maximum Percent Sulfur: | 8. Maximum Percent Ash: |
| 9. Million Btu per SCC Unit: | |
| 10. Segment Comment: | |
| | |

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 **of** 1

| | | |
|--|-------------------|--------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: 90% | | |
| 3. Primary Control Device Code: 061, 062, and 099 | | |
| 4. Secondary Control Device Code: NA | | |
| 5. Potential Emissions: | 0.42 lb/hr | 0.66 ton/yr |
| 6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <u>0</u> to <u>0</u> tons/year | | |
| 8. Emission Factor: 0.0021 lbs/ton Reference: AP-42, Table 3.3-1 | | |
| 9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 10. Calculation of Emissions: PM10_{yearly} = [(200 ton/hr)(3120 hr/yr)(0.0021 lb/ton)] / 2000 lb/ton = 0.66 ton/yr PM10_{hour} = (200 ton/hr)(0.0021 lb/ton) = 0.42 lb/hr | | |
| 11. Pollutant Potential/Estimated Emissions Comment: | | |

Emissions Unit Information Section 14 of 14 .

Allowable Emissions

| |
|---|
| 1. Basis for Allowable Emissions Code: This facility will be subject to 40 CFR, Part 60, subpart 000 rules and regulations. |
| 2. Future Effective Date of Allowable Emissions: Initial Visible Emissions Compliance Test |
| 3. Requested Allowable Emissions and Units: 10 % Opacity |
| 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: Annual EPA Method 9 Compliance Testing. |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

| |
|--|
| 1. Basis for Allowable Emissions Code |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance: |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): |

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field

1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---------------------------------|---|
| 1. Visible Emissions Subtype: | VE |
| 2. Basis for Allowable Opacity: | <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Requested Allowable Opacity: | Normal Conditions: 10 % Exceptional Conditions: 10 % Maximum Period of Excess Opacity Allowed: 0 min/hour |
| 4. Method of Compliance: | Annual EPA Method 9 Visible Emissions Compliance Testing. |
| 5. Visible Emissions Comment: | |

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System:

| | | |
|---|-------------------------------|--------------------------------|
| 1. Parameter Code: | NOT APPLICABLE | |
| 2. CMS Requirement: | <input type="checkbox"/> Rule | <input type="checkbox"/> Other |
| 3. Monitor Information: | | |
| Manufacturer: | | |
| Model Number: | Serial Number: | |
| 4. Installation Date (DD-MON-YYYY): | | |
| 5. Performance Specification Test Date (DD-MON-YYYY): | | |
| 6. Continuous Monitor Comment: | | |

**I. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ☐ [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒ [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section 14 of 14.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ☐] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source pursuant to paragraph © of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☒] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:

| | | | |
|-----|------------------------------|------------------------------|--|
| PM | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| SO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |
| NO2 | <input type="checkbox"/>] C | <input type="checkbox"/>] E | <input checked="" type="checkbox"/>] No |

4. Baseline Emissions: (for diesel generator only)

| | | |
|----|---------|-----------|
| PM | lb/hour | tons/year |
|----|---------|-----------|

EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

| |
|---|
| 1. Process Flow Diagram [X] Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested |
| 2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>VI</u> [] Not Applicable [] Waiver Requested |
| 4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested |
| 5. Compliance Test Report [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable |
| 6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable |
| 7. Operation and Maintenance Plan [X] Attached, Document ID: <u>VII</u> [] Not Applicable |
| 8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>V</u> [] Not Applicable |
| 9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable |

Emissions Unit Information Section 14 of 14

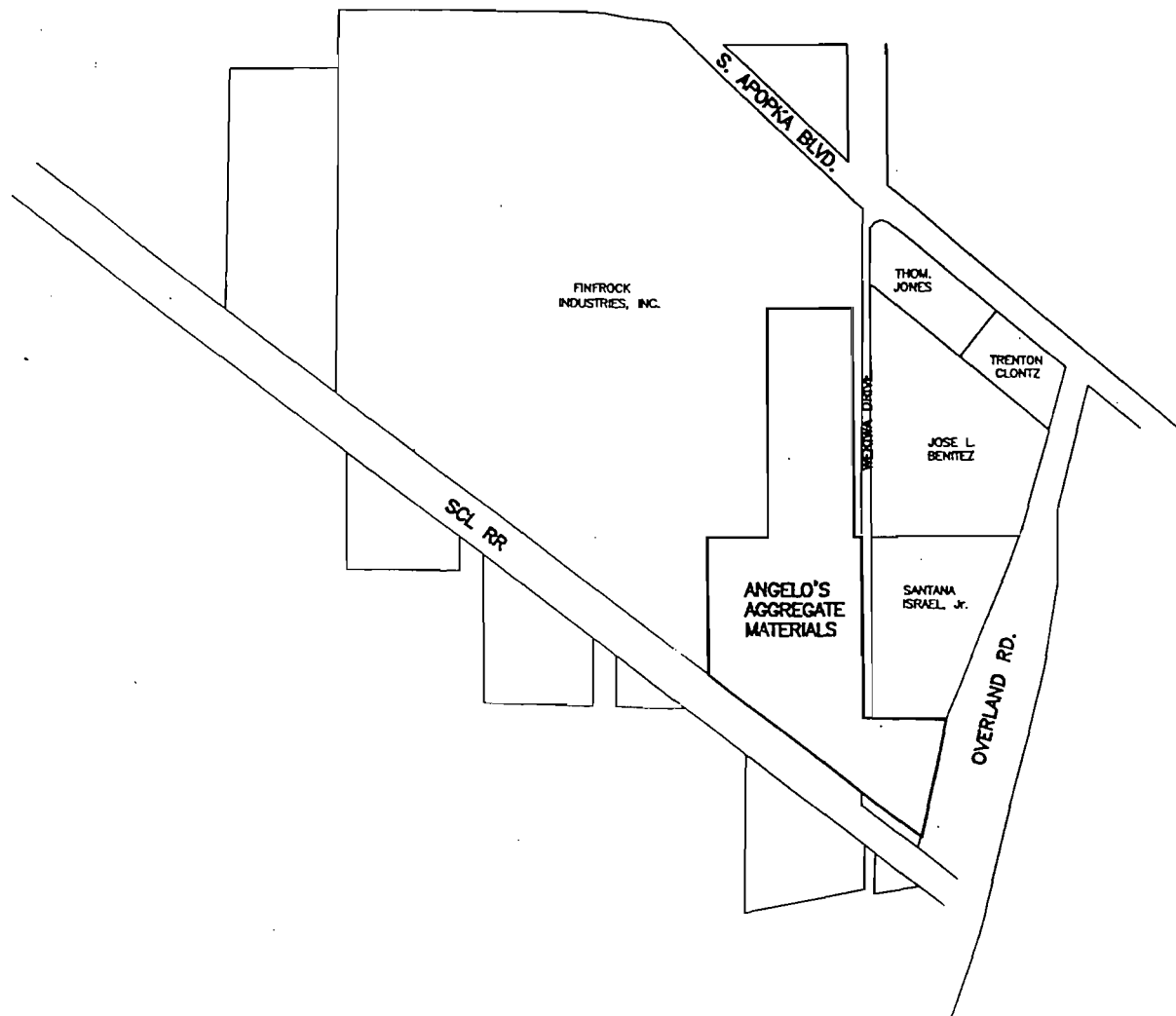
Additional Supplemental Requirements for Category I Applications Only

| |
|--|
| 10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

TABLE OF CONTENTS

- I. FACILITY LOCATION**
- II. SITE PLAN**
- III. FLOW DIAGRAM**
- IV. PRECAUTIONS TO PREVENT
FUGITIVE EMISSIONS**
- V. SUPPLEMENTAL
INFORMATION**
- VI. CONTROL EQUIPMENT**
- VII. O & M PLAN**
- VIII. TYPICAL FUEL ANALYSIS**

I. FACILITY LOCATION



SCALE: 1" = 300' N

87-8400302



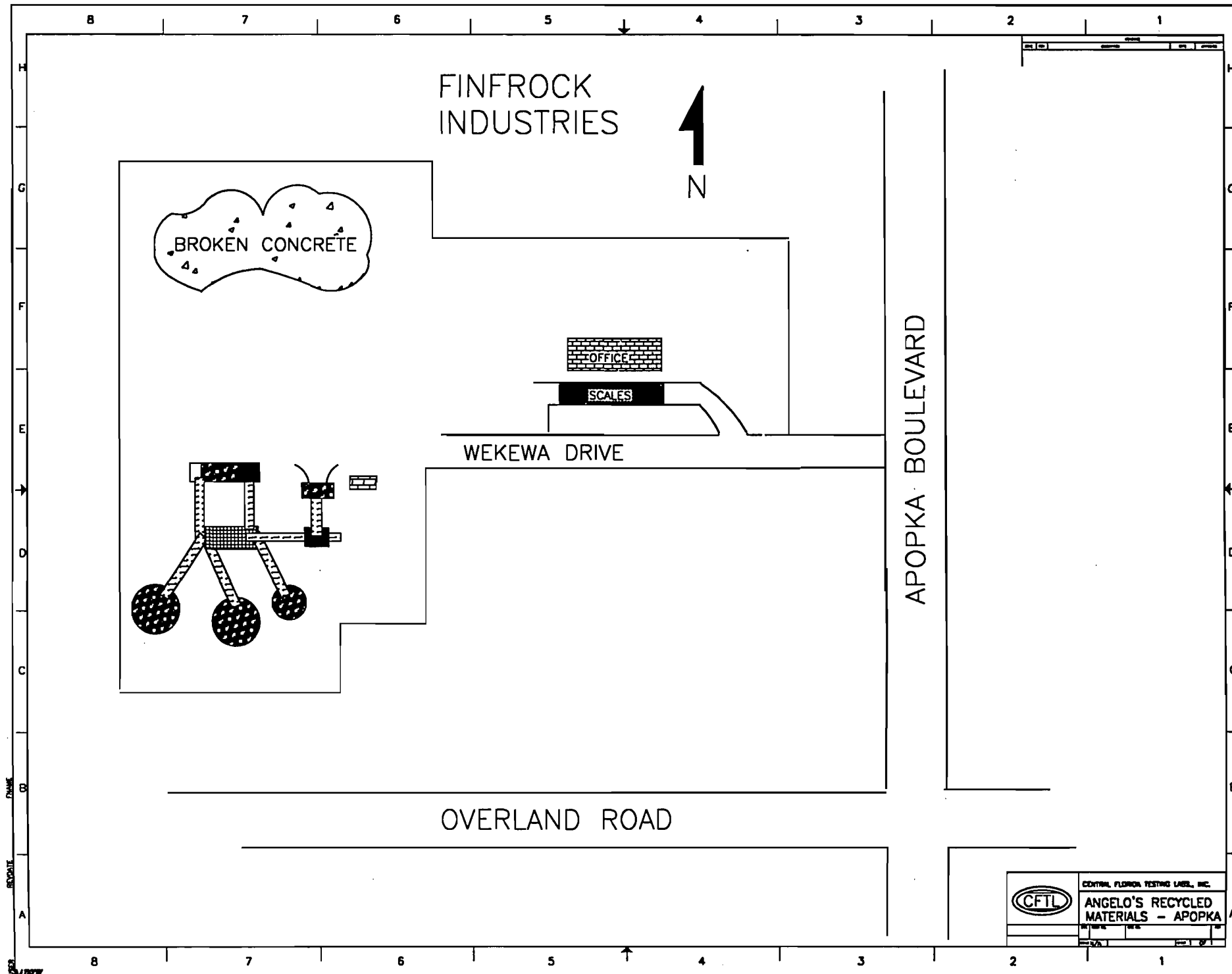
HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801
TELEPHONE (407) 838-3855 - FAX (407) 838-3790

**ANGELO'S AGGREGATE MATERIALS
ADJOINING PARCELS**

II. SITE PLAN



III. FLOW DIAGRAM

PROCESS DESCRIPTION

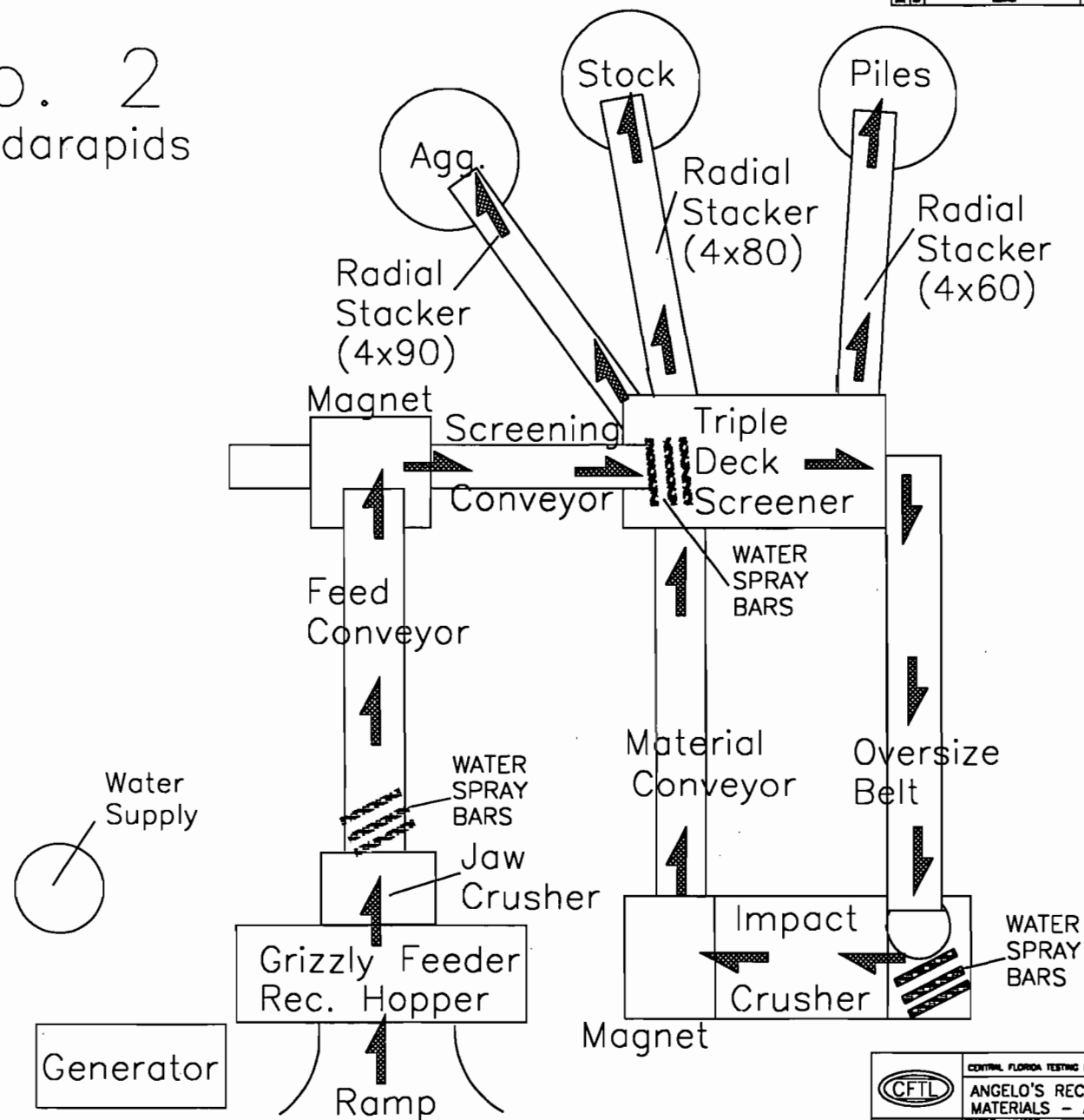
This project consists of a portable secondary crushing plant that will be utilized to recycle reclaimed concrete and asphalt material at various sites throughout the State of Florida, for use as demolition recycling, base material and fill by contracting companies and for sale to the general public.

The process begins with the transfer of reclaimed concrete and asphalt material that has been scalped or excavated from bridges, highways, parking lots, building demolition, etc. is brought to the temporary by dump truck and stockpiled for crushing or the crushing unit is brought to the site of demolition where material has been stockpiled for crushing. This stockpiled material, usually in chunk form ranging from one to twenty inches in diameter contains very little if any fine material and therefore is virtually dust free. This material is too large to reuse in it's reclaimed size, so it has to be screened and crushed to various practical aggregate sizes. The reclaimed concrete are transferred from their stockpiles by a front-end-loader into the vibrating grizzly feeder hopper. From this hopper the reclaimed material vibrates into the crusher where it is crushed to a desired size and drops onto the vibrating screener below the crusher. This crushed material is then transferred by conveyor belt to a metal extractor that removes any metal that may have been within the reclaimed material. After passing the metal extractor the material is then dropped to another conveyor belt where it travels to the screening system. Once the material reaches and drops onto the portable discharge system any over size material is transferred back to the secondary crusher by conveyor, then passes through the secondary crushing unit onto a material conveying belt where it travels back to the screening system, whereas the material that passes through several screens and is dropped onto a appropriate conveyer/stacker belts that stockpiles the material for reuse at a later time.

The majority of fugitive dust created during this process is generated by the vibrating feeder hopper, crushers and at the drop point below the crusher. These emission points as well as all transfer and drop points throughout the plant will be controlled by a self-made water spray bar / spray head dust suppression system that employs spray bars and spray heads at the various emission points throughout the plant. Any fugitives generated by vehicular traffic, winds and airborne particulate from stockpiles will be controlled by the constant use of a water truck employed at this facility and at the different jobsites to keep the entire facility dampened, to control these emissions.

This facility will comply with all FDEP Rules and Regulations referencing portable crushing plants of this type.

Plant No. 2 Cedarapids/Cedarapids Process Flow Diagram



**IV. PRECAUTIONS TO PREVENT
FUGITIVE EMISSIONS**

FUGITIVE EMISSION CONTROL

Precautions to control and prevent fugitive emissions at this facility are accomplished in several different ways. Any stockpiles at this facility are kept damp by sprinker systems and a water truck to control airborne emissions from prevailing winds. Fugitive emissions from vehicular traffic is controlled by dampening roadways with a water truck and posting and enforcing a 5 mph speed limit throughout the facility. .

V. SUPPLEMENTAL INFORMATION

ANGELO'S RECYCLED MATERIALS, INC. - Plant No.2**Total Emissions Produced by Facility**

| Point | Emission Point Name | PM10 lb/hr | PM10 ton/yr | SOx lb/hr | SOx ton/yr | CO lb/hr | CO ton/yr | NOx lb/hr | NOx ton/yr | TOC lb/hr | TOC ton/yr |
|-------|---------------------------------|---------------|----------------|--------------|---------------|-------------|--------------|--------------|---------------|--------------|---------------|
| 001 | Primary Jaw Crusher | 0.12 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 002 | Secondary Impact Crusher | 0.12 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 003 | Triple Deck Screener (7x 20') | 0.42 | 0.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 004 | Feed Conveyor (4 x 30') | 0.10 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 005 | Screening Conveyor (4 x 60') | 0.10 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 006 | Oversize Belt (4 x 60') | 0.10 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 007 | Material Conveyor (4 x 65') | 0.10 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 008 | Radial Stacker Belt (4 x 90') | 0.10 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 009 | Radial Stacker Belt (4 x 80') | 0.10 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 010 | Radial Stacker Belt (4 x 60') | 0.10 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 011 | Caterpillar 800kW Generator | 1.28 | 2.00 | 1.20 | 1.87 | 3.93 | 6.14 | 18.26 | 28.49 | 1.49 | 2.32 |
| 012 | Paved / Unpaved Roads | 0.32 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 013 | Stockpiles / Conveyor Drops | 0.16 | 0.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 014 | Feeder / Receiving Hopper | 0.42 | 0.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | TOTALS: | 3.54 | 5.49 | 1.20 | 1.87 | 3.93 | 6.14 | 18.26 | 28.49 | 1.49 | 2.32 |

The Orlando Sentinel

633 North Orange Avenue
P.O. Box 2833
Orlando, Florida 32802-2833

November 12, 1997

Mr. Bob Coble

Angleo's Recycling Materials
P. O. Box 280226
Tampa, Florida, 33682-0226

Dear Mr. Coble:

We wish to thank you for advertising with The Orlando Sentinel. Your advertisement appeared today, November 12, 1997.

We also wish to apologize any inconvenience that the delay in publishing your advertisement for "Public Notice to Issue Air Permits", due to miscommunication problems. We have spoken previously in order to have this advertisement published in a timely manner.

However, due to unforeseen circumstances, the advertisement was never ran on the publication date as previously indicated by you. We hope that this does not cause any inconvenience on your behalf.

Thank you very much for your patience and understanding. The original publish date for this ad was October 19, 1997.

Sincerely Yours,



Denise Little
Legal Advertising
Representative

cc: file

421 West Church Street, Suite 412
Jacksonville, Florida 32202-4111
Telephone: 904/530-3484

that he/she is the Legal Advertising Representative of The Orlando Sentinel, a daily newspaper published at ORLANDO County, Florida; in ORANGE County, Florida; that the attached copy of advertisement being a RUBBING NOTICE OF I in the matter of DRAFT PERMIT #7770262-061-A

in the ORANGE Court, was published in said newspaper in the issue of 11/12/97

Affiant further says that the said Orlando Sentinel is a newspaper published at ORLANDO County, Florida, in said ORANGE County, Florida, and that the said newspaper has heretofore been continuously published in said ORANGE County, Florida, each Week Day and has been entered as second-class mail matter at the post office in ORLANDO in said ORANGE County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

The foregoing instrument was acknowledged before me this 12 day of November, 19 97 by Denise Little who is personally known to me and who did take an oath.

(SEAL) J. L. NICHOLS
Notary Public
My Comm. Exp. 8/22/2001
61063016

products of combustion from the diesel fuel. Air pollution control is accomplished by wetting as needed.

Total emissions of pollutants are estimated to be:

| Pollutant | Hourly Emissions | Annual Emissions |
|--|------------------|------------------|
| | pounds per hour | tons per year |
| Particulate Matter (PM ₁₀) | 0.1 | 0.0 |
| Mercury (Hg) | 0.0 | 0.0 |
| Carbon Monoxide (CO) | 0.0 | 0.0 |
| Sulfur Dioxide (SO ₂) | 0.0 | 0.0 |
| Volatile Organic Compounds (VOC) | 0.0 | 0.0 |

Because of the low emissions and limited time of operation at any one site, the crusher will not cause or contribute to any violation of an ambient air quality standard.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed DRAFT Permit issuance actions for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulations, 3500 State Road, Mail Station #5505, Tallahassee, Florida 32309-2400. Any written comments filed shall be made available for a public inspection. If written comments received result in a significant change in these DRAFT Permits, the Department shall issue REVISED DRAFT Permits and require, if applicable, another Public Notice.

The Department will issue the FINAL Permit with the conditions of the DRAFT Permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. Mediation is not available for this action. The procedures for petitioning for a hearing are set forth below:

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department 3500 Commonwealth Boulevard, Mail Station #25, Tallahassee, Florida 32309-3000, telephone: 904/448-6370, fax: 904/448-6338. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S. or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 20-5.507 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action, (c) A statement of how each petitioner's substantial interest is affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner; if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dade County Department of Environmental Resources Mgmt.
33 Southwest 2nd Ave., Suite 900
Miami, Florida 33130-1540
Telephone: 305/372-6925

Division of Environmental Science and Engineering
Palm Beach County Health Unit
501 Esplanade
West Palm Beach, Florida 33401
Telephone: 561/255-3070

Dept. of Environmental Protection
Northwest District
180 Government Center, Suite 308
Pensacola, Florida 32501-6794
Telephone: 904/444-8300

Dept. of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite 2008
Jacksonville, Florida 32256
Telephone: 904/448-4300

Broward County Department of Natural Resources Protection
218 Southwest 1st Avenue
Fort Lauderdale, Florida 33301
Telephone: 954/519-1220

Air Quality Division
Pinellas County Department of Environmental Management
300 South Garden Avenue
Clearwater, Florida 34616
Telephone: 813/464-4422

Dept. of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida
Telephone: 813-744-8100

Dept. of Environmental Protection
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/684-7555

Hillsborough County Environmental
Protection Commission
1410 North 21 Street
Tampa, Florida 33605
Telephone: 813/272-6530

Air and Water Quality Division
Regulatory and Environmental Services Department
421 West Church Street, Suite 412
Jacksonville, Florida 32202-4111
Telephone: 904/630-3484

Dept. of Environmental Protection
South Florida District
2295 Victoria Avenue, Suite 304
Fort Myers, Florida 33901
Telephone: 813/332-8975

Dept. of Environmental Protection
Southeast Division
400 North Congress Avenue
West Palm Beach, Florida 33416-5425
Telephone: 561-681-6000

The complete project file includes the application technical evaluation, Draft Permit and the information submitted by the responsible party.

The Orlando Sentinel

Published Daily
\$ 692.00State of Florida } s.s.
COUNTY OF ORANGE

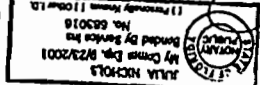
Before the undersigned authority personally appeared Denise Little, who on oath says that he/she is the Legal Advertising Representative of The Orlando Sentinel, a daily newspaper published at ORLANDO in ORANGE County, Florida; that the attached copy of advertisement being a PUBLIC NOTICE OF I in the matter of DRAFT PERMIT #7770282-001-AL

in the ORANGE Court, was published in said newspaper in the issue of 11/12/97

Affiant further says that the said Orlando Sentinel is a newspaper published at ORLANDO in said ORANGE County, Florida, and that the said newspaper has heretofore been continuously published in said ORANGE County, Florida, each Week Day and has been entered as second-class mail matter at the post office in ORLANDO in said ORANGE County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

The foregoing instrument was acknowledged before me this 12 day of November, 19 97 by Denise Little who is personally known to me and who did take an oath.

(SEAL)



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRAFT PERMIT NOS. 7770282-001-AL/7770282-005-AL
PORTABLE CONCRETE AND ASPHALT MATERIAL CRUSHER

The Department of Environmental Protection (Department) gives notice of its intent to issue a modified air construction permit and the initial air operation permit to Angelo's Recycled Materials for a diesel engine powered portable concrete and asphalt material crusher that will be operated at construction and industrial sites throughout Florida. These units were originally permitted under the name of Frontier Recycling, Inc. The crusher is a major source of air pollution and not subject to the Prevention of Significant Deterioration (PSD) regulations, Rule 62-512.403, F.A.C. A Best Available Control Technology determination was not required for this facility. The applicant's name and address are: Angelo's Recycled Materials, P.O. Box 30208, Tampa, Florida 33630-0208.

The applicant proposes to operate the facility in counties covered by this notice. The units will emit fugitive particulate matter and the products of combustion from the diesel fuel. Air pollution control is accomplished by wetting as needed.

Total emissions of pollutants are estimated to be:

| Pollutant | Hourly Emissions pounds per hour | Annual Emissions tons per year |
|--|-------------------------------------|-----------------------------------|
| Particulate Matter (PM ₁₀) | 1.1 | 9.0 |
| Sulfur Dioxide (SO ₂) | 0.2 | 42.7 |
| Carbon Monoxide (CO) | 6.8 | 9.2 |
| Sulfur Dioxide (SO ₂) | 1.8 | 2.8 |
| Nitrogen Oxides (NO _x) | 2.2 | 3.5 |

Because of the low emissions and limited time of operation at any one site, the crusher will not cause or contribute to any violation of an ambient air quality standard.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed DRAFT Permit issuance actions for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulations, 8500 West Glens Road, Mail Station #5505, Tallahassee, Florida 32309-3000. Any written comments filed shall be made available for a public inspection. If written comments received result in a significant change in these DRAFT Permits, the Department shall issue REVISED DRAFT Permits and require, if applicable, another Public Notice.

The Department will issue the FINAL Permit with the conditions of the DRAFT Permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department 3500 Commonwealth Boulevard, Mail Station #25, Tallahassee, Florida 32399-3000, telephone: 904-488-4070, fax: 904-487-4538. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S. or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 25-6.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interest are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dade County Department of
Environmental Resources Mgmt.
33 Southwest 2nd Ave., Suite 900
Miami, Florida 33130-1540
Telephone: 305/372-6925

Division of Environmental Science
and Engineering
Palm Beach County Health Unit
801 Evernia Street
West Palm Beach, Florida 33401
Telephone: 561/255-3070

Dept. of Environmental Protection
Northwest District
160 Government Center, Suite 308
Pensacola, Florida 32501-6794
Telephone: 904-444-6300

Dept. of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite 2008
Jacksonville, Florida 32256
Telephone: 904/448-4300

Broward County Department of
Natural Resource Protection
218 Southwest 1st Avenue
Fort Lauderdale, Florida 33301
Telephone: 954/519-1220

Air Quality Division
Pinellas County Department of
Environmental Management
300 South Garden Avenue
Clearwater, Florida 34616
Telephone: 813/464-4422

Dept. of Environmental Protection
Southwest District
3604 Coconut Palm Drive
Tampa, Florida
Telephone: 813-744-6100

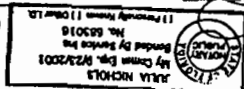
Dept. of Environmental Protection
Central District
3319 Magnolia Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/684-7565

Hillsborough County Environmental
Protection Commission
1410 North 21 Street
Tampa, Florida 33605
Telephone: 813/272-5530

Air and Water Quality Division
Regulatory and Environmental
Services Department
421 West Church Street, Suite 412
Jacksonville, Florida 32202-4111
Telephone: 904/630-3484

The Orlando SentinelPublished Daily
\$ 692.00**State of Florida** } s.s.
COUNTY OF ORANGEBefore the undersigned authority personally appeared Denise Littlewho on oath says
that he/she is the Legal Advertising Representative of The Orlando Sentinel, a daily
newspaper published at ORLANDO County, Florida;
that the attached copy of advertisement, being a DRAFT PERMIT #7770262-001-AL
in the matter of ORANGE Court,was published in said newspaper in the issue of 11/12/97Affiant further says that the said Orlando Sentinel is a newspaper published at
ORLANDO in said
ORANGE County, Florida,
and that the said newspaper has heretofore been continuously published in
said ORANGE County, Florida,
each Week Day and has been entered as second-class mail matter at the post
office in ORLANDO in said
ORANGE County, Florida,
for a period of one year next preceding the first publication of the attached
copy of advertisement; and affiant further says that he/she has neither paid
nor promised any person, firm or corporation any discount, rebate,
commission or refund for the purpose of securing this advertisement for
publication in the said newspaper.The foregoing instrument was acknowledged before me this 12 day of
November, 19 97 by Denise Little
who is personally known to me and who did take an oath.

(SEAL)



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRAFT PERMIT #05-7770262-001-AL/7770262-005-AL
PORTABLE CONCRETE AND ASPHALT MATERIAL CRUSHER

The Department of Environmental Protection (Department) gives notice of its intent to issue a modified air construction permit and the initial air operation permit to Angelo's Recycled Materials for a diesel engine powered portable concrete and asphalt material crusher that will be operated at construction and industrial sites throughout Florida. These permits were originally permitted under the name of Fortler Recycling, Inc. The crusher is a major source of air pollution and not subject to the Prevention of Significant Deterioration (PSD) regulations, Rule 62-212.403, F.A.C. A Best Available Control Technology determination was not required for this facility. The applicant's name and address are: Angelo's Recycled Materials, P.O. Box 802228, Tampa, Florida 33622-0228.

The applicant proposes to operate the facility in counties covered by this notice. The units will emit higher particulate matter and the products of combustion from the diesel fuel. Air pollution control is accomplished by using as needed.

Total emissions of pollutants are estimated to be:

| Pollutant | Hourly Emissions pounds per hour | Annual Emissions tons per year |
|--|-------------------------------------|-----------------------------------|
| Particulate Matter (PM ₁₀) | 8.1 | 7.0 |
| Mercury (Hg) (MCH) | 2.2 | 0.2 |
| Carbon Monoxide (CO) | 6.8 | 5.9 |
| Sulfur Dioxide (SO ₂) | 1.8 | 1.6 |
| Volatile Organic Compounds (VOC) | 2.2 | 1.9 |

Because of the low emissions and limited time of operation at any one site, this crusher will not cause or contribute to any violation of an ambient air quality standard.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed DRAFT Permit issuance actions for a period of 14 (fourteen) days from the date of publication of this notice. Written comments should be provided to the Department's Bureau of Air Regulations, 8000 West Beach Road, Mail Station #255, Tallahassee, Florida 32303-2455. Any written comments filed shall be made available for a public inspection. If written comments received result in a significant change in these DRAFT Permit, the Department shall issue RE-vised DRAFT Permits and require, if applicable, another Public Notice.

The Department will issue the FINAL Permit with the conditions of the DRAFT Permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. Mediation is not available for this action. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed in the Office of General Counsel of the Department, 3000 Commonwealth Boulevard, Mail Station #25, Tallahassee, Florida 32303-2000, telephone: (904)489-4370, fax: (904)487-4028. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S. or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-6.307 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interest is affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner; if any (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:30 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Deek County Department of
Environmental Resources Mgmt.
33 Southwest 2nd Ave., Suite 900
Miami, Florida 33130-1540
Telephone: 305/372-0525

Division of Environmental Science
and Engineering
Palm Beach County Health Unit
801 Evernia Street
West Palm Beach, Florida 33401
Telephone: 561/955-3070

Dept. of Environmental Protection
Northwest District
160 Government Center, Suite 308
Pensacola, Florida 32501-6794
Telephone: 904/444-6300

Dept. of Environmental Protection
Northeast District
7825 Regencyway Way, Suite 2008
Jacksonville, Florida 32254
Telephone: 904/448-4300

Broward County Department of
Natural Resource Protection
718 Southwest 1st Avenue
Fort Lauderdale, Florida 33301
Telephone: 954/519-1220

Air Quality Division
Pinellas County Department of
Environmental Management
300 South Garden Avenue
Clearwater, Florida 34616
Telephone: 813/464-4422

Dept. of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida
Telephone: 813/744-6100

Dept. of Environmental Protection
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32833-3737
Telephone: 407/884-7555

Hillsborough County Environmental

Protection Commission
1410 North 21 Street
Tampa, Florida 33606
Telephone: 813/272-6330

Air and Water Quality Division
Regulatory and Environmental
Services Department
421 West Church Street, Suite 412
Jacksonville, Florida 32202-4111
Telephone: 904/630-3484

action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dade County Department of Environmental Resources
Miami
25 Southwest 2nd Ave.
Suite 900
Miami, Florida 33130-1540
Telephone: 305/372-6925

Division of Environmental Science and Engineering
Palm Beach County Health Unit
901 Evernia Street
West Palm Beach, Florida 33401
Telephone: 561/355-3070

Dept. of Environmental Protection
Northwest District
160 Government Center,
Suite 308
Pensacola, Florida 32501-5794
Telephone: 904/444-8300

Dept. of Environmental Protection
Northeast District
7825 Baymeadows Way,
Suite 2008
Jacksonville, Florida 32256
Telephone: 904/448-4300

Broward County Department of Natural Resource Protection
218 Southwest 1st Avenue
Fort Lauderdale, Florida 33301
Telephone: 954/519-1220

Air Quality Division
Pinellas County Department of Environmental Management
300 South Garden Avenue
Clearwater, Florida 34616
Telephone: 813/464-4422

Dept. of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida
Telephone: 813/744-6100

Dept. of Environmental Protection
Central District
3319 Maguire Boulevard,
Suite 232
Orlando, Florida 32803-3767
Telephone: 407/984-7555

Hillsborough County Environmental Protection Commission
1410 North 21 Street
Tampa, Florida 33605
Telephone: 813/272-5530

Air and Water quality Division
Regulatory and Environmental Services Department
421 West Church Street,
Suite 412
Jacksonville, Florida 32202-4111
Telephone: 904/630-3484

Dept. of Environmental Protection South Florida District
2295 Victoria Avenue,
Suite 364
Fort Myers, Florida 33901
Telephone: 813/332-6975

Dept. of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600

The complete project file includes the application, technical evaluations, Draft Permits, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-

105

ink

following information: (a) The name, address, and telephone number of each petitioner, the applicants name and address, the Permit File Numbers and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:
Dade County Department of
Environmental Resources

4

Mgmt.

33 Southwest 2nd Ave.,
Suite 900
Miami, Florida 33130-1540
Telephone: 305/372-6925

Division of Environmental
Science and Engineering
Palm Beach County Health
Unit

901 Evernia Street
West Palm Beach, Florida
33401
Telephone: 561/355-3070

Dept. of Environmental
Protection
Northwest District
160 Government Center,
Suite 308
Pensacola, Florida 32501-5794
Telephone: 904/444-8300

Dept. of Environmental
Protection
Northeast District
7825 Baymeadows Way,
Suite 200B
Jacksonville, Florida 32256
Telephone: 904/448-4300

Broward County Department
of
Natural Resource Protection
218 Southwest 1st Avenue
Fort Lauderdale, Florida
33301
Telephone: 954/519-1220

Air Quality Division
Pinellas County Department
of
Environmental Management
300 South Garden Avenue
Clearwater, Florida 34616
Telephone: 813/464-4422

Dept. of Environmental Pro-
tection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida
Telephone: 813/744-6100

Dept. of Environmental
Protection
Central District
3319 Maguire Boulevard,
Suite 232
Orlando, Florida 32803-3767

5

Telephone: 407/984-7555

Hillsborough County
Environmental
Protection Commission
1410 North 21 Street
Tampa, Florida 33605
Telephone: 813/272-5530
Air and Water quality Division
Regulatory and Environmen-
tal Services Department
421 West Church Street,
Suite 412
Jacksonville, Florida
32202-4111
Telephone: 904/630-3484

Dept. of Environmental
Protection South Florida Dis-
trict
2295 Victoria Avenue,
Suite 364
Fort Myers, Florida 33901
Telephone: 813/332-6975

Dept. of Environmental
Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida
33416-5425
Telephone: 561/681-6600

The complete project file in-
cludes the application, techni-
cal evaluations, Draft Permits,
and the information submit-
ted by the responsible official,
exclusive of confidential re-
cords under Section 403.111,
F.S. Interested persons may
contact the Administrator,
New Resource Review Sec-
tion at 111 South Magnolia
Drive, Suite 4, Tallahassee,
Florida 32301, or call 850/488-
1344, or call 850/488-1344, for
additional information
902810/29/97

6

A Ad #50960

Exp @ 0:00 Runs Last date Acct 208271

Name VIRONMENTAL DEPARTMENT OF EN Business X Ph (904) 9225907

Address REGULATION Alt PH (904) 9225907

2600 BLAIR STONE ROAD SUITE 158

City TALLAHASSEE State FL Zip 32399-2400

AD: Gvnb FAX - BOB C. PO# Misc Sales Rep 0073 Exp

Class 0 Type V Acc Type C T/A A #1 Box #000 Clr Code Clr Nbr 0

RH Up MG Nat Rate SR Logo Bold Holi Char RD ()

ES #1: Times 1 Start 10/29/97 Stop 10/29/97

BUYS: TTFR K

Skip PP 1

ES #2: Times Start Stop

BUYS: K

Skip PP 2

ES #3: Times Start Stop

BUYS: K

Skip PP 3

Size x I/L Seq2672

Holds: Supervisor L by

Credit Basket LEGAL

Remarks: NEEDS AFFIDAVIT W/ALL

Vol (Trans);legals;COUNTIES LISTED!!! #73 CHECK FOR DUP!!!!!!!!!!

Total Lines 322
Total Cost 858.52

Ad Cost 856.52
Other 2.00

Tear 2.00

Entrd 10/23/97 at 15:43 By ADFAX

Production R by DONNA/0065

PUBLIC NOTICE OF

INTENT TO ISSUE

AIR PERMIT

STATE OF FLORIDA

DEPARTMENT OF

ENVIRONMENTAL

PROTECTION

DRAFT Permit Nos:

7770262-001-AC/7770262-005-

AO

Portable Concrete and

Asphalt Material Crusher

The Department of Environ-
mental Protection (Depart-
ment) gives notice of its intent
to issue a modified air con-
struction permit and the initial
air operation permit to An-
gelo's Recycled Materials for
a diesel engine powered por-
table concrete and asphalt
material crusher that will be
operated at construction and
industrial sites throughout
Florida. These units were
originally permitted under the
name of Frontier Recycling,
Inc. The crusher is a minor
source of air pollution and not
subject to the Prevention of
Significant Deterioration
(PSD) regulations, Rule 62-
212.400, F.A.C. A Best Avail-
able Control Technology de-

termination was not required for this facility. The applicant's name and address are: Angelo's Recycled Materials, P.O. Box 280226, Tampa, Florida 33682-0226.

The applicant proposes to operate the facility in counties covered by this notice. The units will emit fugitive particulate matter and the products of combustion from the diesel fuel. Air pollution control is accomplished by wetting as needed.

Total emissions of pollutants are estimated to be:

Pollutant Hourly Emissions
pounds per hour

Annual Emissions

tons per year

Particulate Matter (PM/PM10)

5.1 8.0

Nitrogen Oxides (NOx) 27.3
42.7

Carbon Monoxide (CO) 5.9 9.2

Sulfur Dioxide (SO2) 1.8 2.8

Volatile Organic Compounds
(VOC) 2.2 3.5

Because of the low emissions and limited time operation at any one site, the crusher will not cause or contribute to any violation of an ambient air quality standard.

The Department will issue the FINAL Permits; in accordance with the conditions of the DRAFT Permits unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed DRAFT Permits issuance actions for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to The Department's Bureau of Air Regulation, 2600 Blair Stone Road. Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a sig-

2

nificant change in these DRAFT Permits, the Department shall issue Revised DRAFT Permits and require, if applicable, another Public Notice.

The Department will issue the FINAL Permits with the conditions of the DRAFT Permits unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. Mediation is not available for this action. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone; 850/488-9370, fax 850/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the

3

THE TAMPA TRIBUNE
Published Daily
Tampa, Hillsborough County, Florida

BEST AVAILABLE COPY

State of Florida
County of Hillsborough) ss.

Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE CITRUS, SUMTER, HERNANDO, PASCO, PINELLAS, POLK
HILLSBOROUGH, MANATEE, HARDEE, HIGHLANDS, SARASOTA, DESOTO
in the matter of PUBLIC NOTICE OF INTENT

was published in said newspaper in the issues of OCTOBER 29, 1997

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

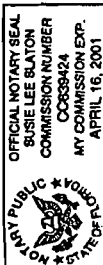
J. Rosenthal

Sworn to and subscribed before me, this 30 day
of OCTOBER, A.D. 1997

Personally Known or Product Identification
Type of Identification Produced

(SEAL)

Susie Lee Slaton



PUBLIC NOTICE OF
INTENT TO ISSUE
AIR PERMIT
STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL
PROTECTION
DRAFT Permit No.:
7770242-001-AC/7770242-005-
AO

Portable Concrete and
Asphalt Material Crusher
The Department of Environ-
mental Protection (Depart-
ment) gives notice of its intent
to issue a modified air con-
struction permit and the initial
air operation permit to An-
gelo's Recycled Materials for
a diesel engine powered por-
table concrete and asphalt
material crusher that will be
operated at construction and
industrial sites throughout
Florida. These units were
originally permitted under the
name of Frontier Recycling,
Inc. The crusher is a minor
source of air pollution and not
subject to the Prevention of
Significant Deterioration
(PSD) regulations, Rule 62-
12.000, F.A.C. A Best Avail-
able Control Technology de-
termination was not required
for this facility. The appli-
cant's name and address are:
Angelo's Recycled Materials,
P.O. Box 280226, Tampa, Flori-
da 33628-0226.

The applicant proposes to
operate the facility in counties
covered by this notice. The
units will emit fugitive partic-
ulate matter and the products
of combustion from the diesel
fuel. Air pollution control is
accomplished by wetting as
needed.

Total emissions of pollut-
ants are estimated to be:

Pollutant: Hourly Emissions
pounds per hour
Annual Emissions
tons per year

Particulate Matter (PM10)

5.1 1.5

Nitrogen Oxides (NOx) 27.3

2.7

Carbon Monoxide (CO) 5.9 0.2

Sulfur Dioxide (SO2) 1.8 2.8

Volatile Organic Compounds
(VOC) 2.3 3.5

Because of the low emis-
sions and limited time opera-
tion of any one site, the crush-
ers will not cause or contribute
to any violation of an ambient
air quality standard.

The Department will issue
the FINAL Permits in ac-
cordance with the conditions of
the DRAFT Permits unless a
response received in ac-
cordance with the following pro-
cedures results in a different
decision or significant change
of terms or conditions.

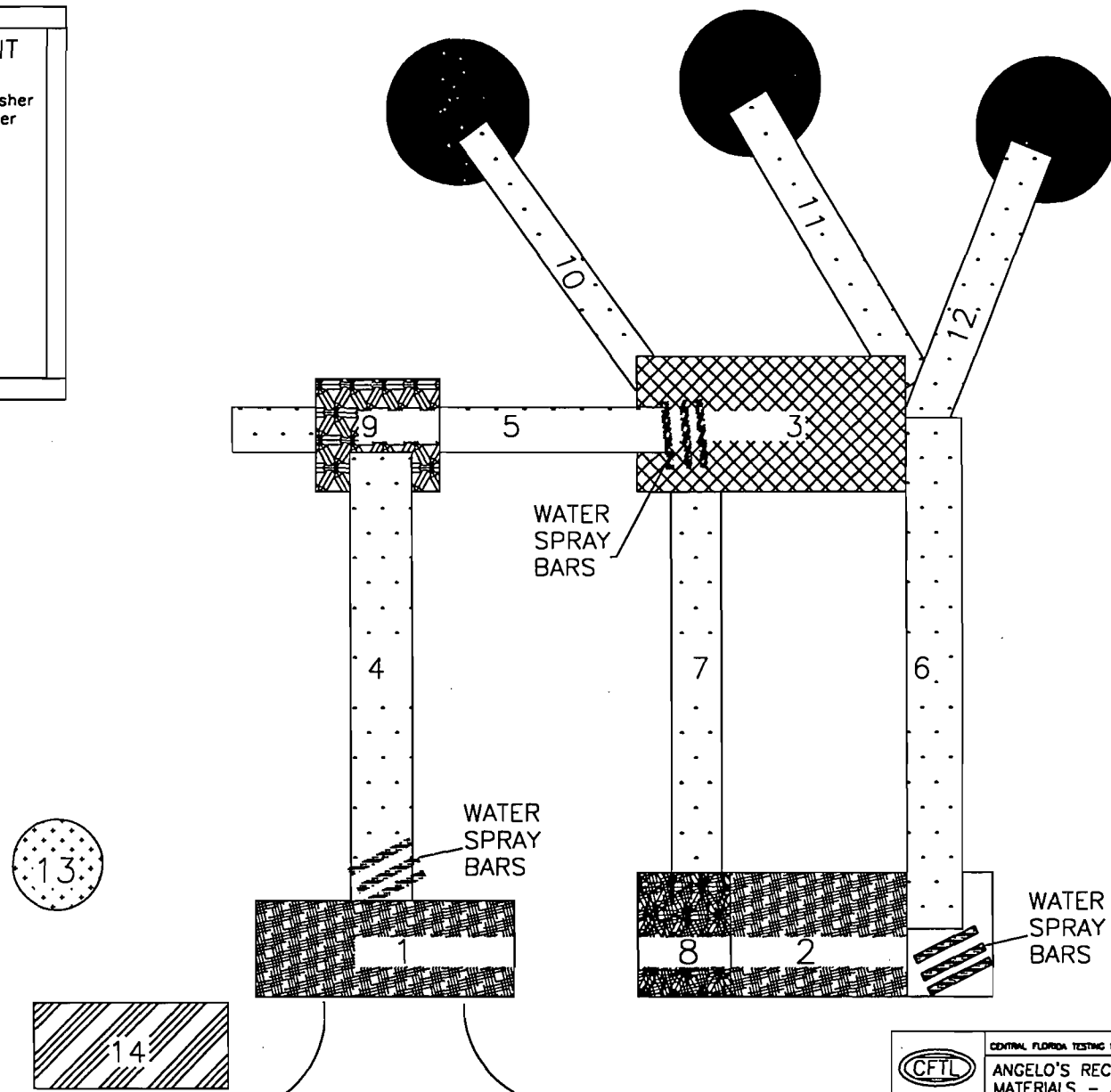
The Department will accept
written comments concerning
the proposed DRAFT Permits
within a period of 14 (fourteen) days from the
date of publication of this No-
tice. Written comments
should be provided to The De-
partment's Bureau of Air Reg-
ulation, 2600 Blair Stone Road,
Mail Station #5505, Tallahas-
see, Florida 32399-0505, Any
written comments filed shall
be made available for public
inspection. If written com-
ments received result in a sig-
nificant change in these
DRAFT Permits, the Depart-
ment shall issue Revised
DRAFT Permits and require,
if applicable, another Public
Notice.

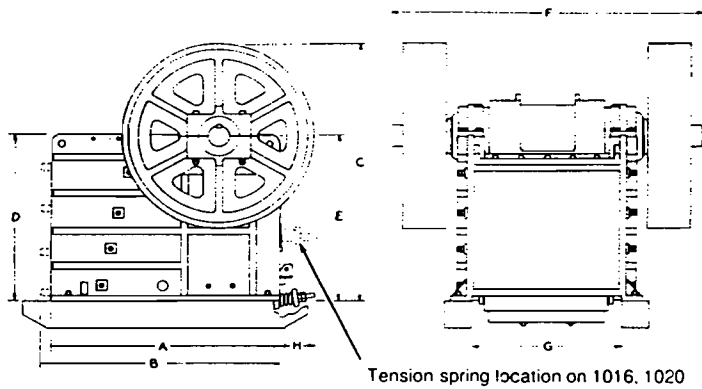
The Department will issue
the FINAL Permits with the
conditions of the DRAFT Per-
mits unless a timely petition
for an administrative hearing
is filed pursuant to Sections
120.549 and 120.57 F.S. A peti-
tion is not available for this
action. The procedures for pe-
titioning for a hearing are set
forth below.

A person whose substantial
interests are affected by the
Department's proposed per-
mits may decide not to petition
for an administrative hearing
in accordance with Sections
120.549 and 120.57 F.S. The
petition must contain the in-
formation set forth below and
must be filed (received) in the
Office of General Counsel of
the Department, 2600 Con-
stantineau Boulevard, Mail
Station #533, Tallahassee,
Florida 32399-0503, telephone:
904/488-9370, fax: 904/487-
4938. Petitions must be filed
within fourteen days of pub-
lication of the public notice or
within fourteen days of re-
ceipt of this notice of intent,
whichever occurs first. A peti-
tioner must mail a copy of the
petition to the applicant at the
address indicated above, on
the time of filing. The failure
of any person to file a petition
within the appropriate time
period shall constitute a waiver
of that person's right to
request administrative de-
termination (hearing) under
Sections 120.549 and 120.57
F.S. or to intervene in this
proceeding and participate as
a party to it. Any subsequent
intervention will be only of the
approval of the presiding offi-
cer upon the filing of a motion
in compliance with Rule 28-
5.307 of the Florida Adminis-
trative Code.

A petition must contain the
following information: (a) The
name, address, and telephone
number of each petitioner; the
applicant's name and address;
the Permit File Number and
the county in which the pro-
ject is proposed; (b) A state-
ment of how and when each
petitioner received notice of
the Department's action or
proposed action; (c) A state-
ment of how each petitioner's
substantial interests are af-
fected by the Department's
action or proposed action; (d)
A statement of the material
facts disputed by petitioner, if
any; (e) A statement of the
facts that the petitioner con-
tends warrant reversal or
modification of the Depart-
ment's action or proposed
action; (f) A statement iden-
tifying the rules or statutes that
the petitioner contends re-
quire reversal or modification
of the Department's action or
proposed action; and (g) A
statement of the relief sought
by the petitioner, stating pre-
cisely the action that the peti-
tioner wants the Department to
take with respect to the
Department's action or pro-
posed action addressed in this
notice of intent.

1. Cedaropids 3054 Jaw Crusher
2. Cedaropids 45045 Impact Crusher
3. Cedaropids Triple Deck Screener
(7'x20')
4. Feed Conveyor (4'x30')
5. Screening Conveyor (4'x50')
6. Oversize Belt (4'x60')
7. Material Conveyor (4'x65')
8. Electro Magnet (3'x6')
9. Electro Magnet (3'x6')
10. Radial Stacker #1 (4'x90')
11. Radial Stacker #2 (4'x80')
12. Radial Stacker #3 (4'x60')
13. Water Supply
14. Caterpillar Generator Set





Recommended Openings at Closed Stroke - inches & (mm)

| Size | Min. | Max. | Size | Min. | Max. |
|------|---------|---------|------|----------|----------|
| 1016 | ¾ (19) | 3½ (89) | 2248 | 2½ (64) | 6 (152) |
| 1020 | ¾ (19) | 3½ (89) | 2436 | 2½ (64) | 6 (152) |
| 1024 | ¾ (19) | 3½ (89) | 2438 | 4½ (114) | 8 (203) |
| 1036 | 1½ (38) | 3½ (89) | 2542 | 3½ (89) | 10 (254) |
| 1236 | 1½ (38) | 5 (127) | 2742 | 3½ (89) | 10 (254) |
| 1242 | 1½ (38) | 5 (127) | 3042 | 4 (102) | 13 (330) |
| 1248 | 1½ (38) | 5 (127) | 3054 | 3½ (89) | 13 (330) |
| 1524 | 1½ (38) | 5 (127) | 3242 | 4 (102) | 13 (330) |
| 1636 | 1½ (38) | 5 (127) | 3648 | 4 (102) | 13 (330) |
| 1642 | 1½ (38) | 5 (127) | 3660 | 4 (102) | 13 (330) |
| 1648 | 1½ (38) | 5 (127) | 4242 | 14 (356) | 23 (584) |
| 1824 | 1½ (38) | 5 (127) | 4248 | 4 (102) | 13 (330) |
| 1836 | 1½ (38) | 5 (127) | 5460 | 6 (152) | 20 (508) |
| 2236 | 2½ (64) | 6 (152) | 5748 | 19 (483) | 28 (711) |

Dimension to the nearest inch & 5mm

| Model | 1016 | 1020 | 1024 | 1036 | 1236 | 1242 | 1248 | 1524 | 1636 | 1642 | 1648 | 1824 | 1836 | 2236 |
|-------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| A | 40 1015 | 48 1220 | 45 1145 | 48 1220 | 48 1220 | 56 1420 | 59 1500 | 55 1395 | 61 1550 | 71 1800 | 66 1675 | 56 1420 | 64 1625 | 65 1650 |
| B | — | — | — | — | — | — | — | — | — | 73 1855 | — | — | — | — |
| C | 41 1040 | 46 1170 | 46 1170 | 46 1170 | 51 1295 | 55 1395 | 56 1420 | 57 1445 | 63 1600 | 76 1930 | 70 1780 | 57 1445 | 63 1600 | 77 1955 |
| D | 24 610 | 28 710 | 28 710 | 28 710 | 32 810 | 33 840 | 35 890 | 36 915 | 41 1040 | 46 1170 | 41 1040 | 36 915 | 41 1040 | 48 1220 |
| E | 26 660 | 28 710 | 28 710 | 28 710 | 33 840 | 34 865 | 35 890 | 39 990 | 42 1065 | 48 1220 | 42 1065 | 39 990 | 42 1065 | 49 1245 |
| F | 58 1470 | 72 1830 | 72 1830 | 81 2055 | 81 2055 | 98 2490 | 104 2640 | 67 1700 | 92 2335 | 99 2515 | 94 2385 | 77 1955 | 92 2335 | 92 2335 |
| G | 22 560 | 26 660 | 27 685 | 41 1040 | 41 1040 | 47 1195 | 53 1345 | 27 685 | 41 1040 | 47 1195 | 53 1345 | 27 685 | 41 1040 | 43 1090 |
| H | 14 355 | 14 355 | 21 535 | 18 455 | 19 480 | 20 510 | 19 480 | 18 455 | 16 405 | 20 510 | 16 405 | 19 480 | 16 405 | 17 430 |

| Model | 2248 | 2436 | 2438 | 2542 | 2742 | 3042 | 3054 | 3242 | 3648 | 3660 | 4242 | 4248 | 5748 | 5460 |
|-------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| A | 79 2005 | 88 2235 | 67 1700 | 82 2080 | 88 2235 | 88 2235 | 88 2235 | 93 2360 | 107 2715 | 118 2995 | 103 2615 | 123 3125 | 138 3505 | 149 3785 |
| B | 81 2055 | 91 2310 | — | 85 2160 | 88 2235 | 91 2311 | 91 2311 | 99 2515 | 113 2870 | — | 109 2770 | 126 3200 | 141 3580 | 152 3860 |
| C | 83 2110 | 89 2260 | 77 1955 | 93 2360 | 92 2337 | 92 2337 | 92 2337 | 105 2665 | 120 3050 | 125 3175 | 105 2665 | 137 3480 | 137 3480 | 172 4370 |
| D | 52 1320 | 61 1550 | 50 1270 | 63 1600 | 62 1575 | 62 1575 | 63 1600 | 75 1905 | 82 2080 | 86 2185 | 75 1905 | 96 2440 | 96 2440 | 127 3225 |
| E | 54 1370 | 61 1550 | 49 1245 | 65 1650 | 64 1626 | 64 1626 | 64 1626 | 77 1955 | 84 2135 | 88 2235 | 77 1955 | 101 2565 | 101 2565 | 130 3300 |
| F | 99 2515 | 94 2385 | 92 2335 | 95 2415 | 99 2515 | 99 2515 | 110 2795 | 99 2515 | 101 2565 | 119 3025 | 99 2515 | 120 3050 | 120 3050 | 140 3555 |
| G | 53 1345 | 43 1090 | 43 1090 | 45 1145 | 47 1195 | 47 1195 | 69 1755 | 47 1195 | 52 1320 | 78 1980 | 47 1195 | 55 1395 | 55 1395 | 67 1700 |
| H | 16 405 | 17 430 | 18 455 | 19 480 | 17 430 | 17 430 | 20 510 | 22 560 | 20 510 | 28 711 | 22 560 | 20 510 | 20 510 | 18 455 |

Cedarapids Inc • 916 Sixteenth St NE • Cedar Rapids IA 52402 USA • Telephone 319 363 3511 • Fax 319 399 4871

Standard Features

Fabricated, stress-relieved welded steel base
 Rib-reinforced side plates
 Close-tolerance machining of jaw plate backs and seating surfaces
 Reversible key plates through model 2438
 Drop-forged, heat-treated, chrome-nickel-steel overhead eccentric shaft
 Spherical self-aligning roller bearings
 Hydraulic bearing removal for 3648 side bearing, models 4248 & 5460 side and pitman bearings
 Cast steel pitman
 Hydraulic/shim toggle seat adjustment (discharge opening) except wedge adjustment on 1016 and 1020
 One smooth and one grooved flywheel
 Split-hub flywheels
 Standard left-hand drive (face tension spring)

Options

V-belt drives
 Grooving second flywheel
 Circulating oil lubrication system with reservoir and low-oil alarm for 1836 and above
 Steel skid for crusher and motor for 2236 and above
 Motor platform for 2236 and above
 Operator's platform, ladder and crusher hopper for 2236 and above
 Stationary grizzly with bypass chute for 2236 and above
 Undercrusher discharge chute to belt conveyor, end or side discharge, for 2236 and above

Dimensions to nearest inch & mm - weights (kg)

| Model | 1016 | 1020 | 1024 | 1036 | 1236 | 1242 | 1248 | 1524 | 1636 | 1642 | 1648 | 1824 | 1836 | 2236 |
|----------------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|
| Weights | 5306 2406 | 7000 3175 | 8255 3744 | 12,551 5693 | 13,978 6340 | 19,936 9042 | 24,300 11022 | 12,305 5581 | 21,003 9527 | 33,998 15421 | 28,406 12885 | 12,426 5636 | 21,280 9653 | 24,903 11296 |
| HP | 20-30 | 25-40 | 40-50 | 55-70 | 60-75 | 70-100 | 80-120 | 40-60 | 60-90 | 100-130 | 100-150 | 40-60 | 60-90 | 90-125 |
| RPM | 300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 |
| Jaw Opening | 10x16 255x405 | 10x20 255x510 | 10x24 255x610 | 10x36 255x915 | 12x36 305x915 | 12x42 305x1065 | 12x48 305x1220 | 15x24 380x610 | 16x36 405x915 | 16x42 405x1065 | 16x48 405x1220 | 18x24 455x610 | 18x36 455x915 | 22x36 560x915 |
| Shaft Dia. | 3.937 | 4.4375 | 4.4375 | 5.4375 | 5.9375 | 6.4375 | 6.4375 | 4.921 | 6.4375 | 8.6603 | 7.091 | 4.921 | 6.4375 | 6.4375 |
| Side Bearing | 85 | 113 | 113 | 138 | 151 | 164 | 164 | 125 | 164 | 220 | 180 | 125 | 164 | 164 |
| Shaft Dia. | 5.120 | 5.907 | 5.907 | 7.4821 | 7.8764 | 7.875 | 7.875 | 6.694 | 7.875 | 10.2383 | 8.664 | 6.694 | 7.875 | 7.875 |
| Pitman Bearing | 130 | 150 | 150 | 190 | 200 | 200 | 200 | 170 | 200 | 260 | 220 | 170 | 200 | 200 |
| Std. Grooved Flywheel Dia. | 30 760 | 36 915 | 36 915 | 36 915 | 36 915 | 42 1065 | 42 1065 | 36 915 | 42 1065 | 55 1395 | 42 1065 | 36 915 | 42 1065 | 55 1395 |
| Face Std. Flywheel | 7 175 | 11 280 | 11 280 | 11 280 | 11 280 | 12 305 | 12 305 | 11 280 | 12 305 | 13 330 | 12 305 | 11 280 | 12 305 | 13 330 |
| Stationary Jaw Length | 20 510 | 22 560 | 21 535 | 24 610 | 28 710 | 29 735 | 29 735 | 34 865 | 34 865 | 38 965 | 34 865 | 33 840 | 34 865 | 43 1090 |
| Movable Jaw Length | 26 660 | 27 685 | 27 685 | 27 685 | 31 785 | 33 840 | 34 865 | 40 1015 | 41 1040 | 45 1145 | 41 1040 | 40 1015 | 41 1040 | 50 1270 |

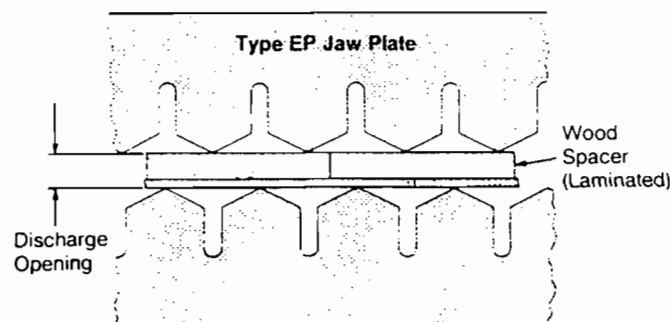
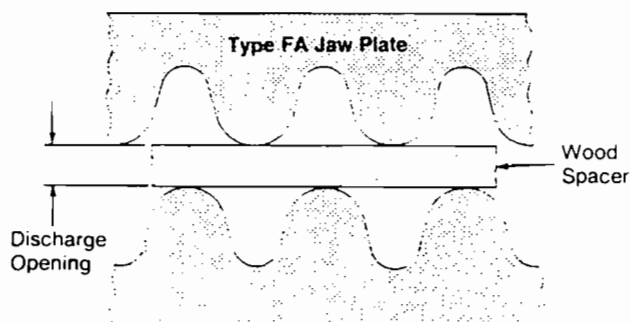
| Model | 2248 | 2436 | 2438 | 2542 | 2742 | 3042 | 3054 | 3242 | 3648 | 3660 | 4242 | 4248 | 5748 | 5460 |
|----------------------------|-------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Weights | 43,094 19547 | 46,737 21200 | 26,017 11801 | 42,095 19366 | 48,520 22008 | 48,520 22008 | 52,740 28269 | 57,137 25917 | 79,653 36131 | 107,664 48836 | 58,838 26689 | 104,567 47431 | 117,000 53071 | 196,258 89023 |
| HP | 127-175 | 125-150 | 90-125 | 125-175 | 125-175 | 125-175 | 125-175 | 150-200 | 200-250 | 250-300 | 150-200 | 250-300 | 250-300 | 350-450 |
| RPM | 225-275 | 225-275 | 250-300 | 225-275 | 225-275 | 225-275 | 225-275 | 225-275 | 200-250 | 210-235 | 225-275 | 200-225 | 200-225 | 200 |
| Jaw Opening | 22x48 560x1220 | 24x36 610x915 | 24x38 610x965 | 25x42 625x1065 | 27x42 685x1065 | 30x42 760x1065 | 30x54 760x1372 | 32x42 810x1065 | 36x48 915x1220 | 36x60 915x1524 | 42x42 1065x1065 | 42x48 1065x1220 | 57x48 1445x1220 | 54x60 1372x1524 |
| Shaft Dia. | 8.36603 | 8.6603 | 6.4375 | 7.091 | 8.6603 | 8.6603 | 8.6603 | 8.6603 | 10.375 | 14.000 | 8.6603 | 14.000 | 14.000 | 18.000 |
| Side Bearing | 220 | 220 | 164 | 180 | 220 | 220 | 220 | 220 | 264 | 356 | 220 | 356 | 356 | 457 |
| Shaft Dia. | 10.2383 | 10.2383 | 7.875 | 8.6645 | 10.2383 | 10.2383 | 10.2383 | 10.2383 | 11.815 | 15.570 | 10.2383 | 15.750 | 15.750 | 19.687 |
| Pitman Bearing | 260 | 260 | 200 | 220 | 260 | 260 | 260 | 260 | 300 | 400 | 260 | 400 | 400 | 500 |
| Std. Grooved Flywheel Dia. | 57 1445 | 57 1445 | 55 1395 | 57 1445 | 57 1445 | 57 1445 | 57 1445 | 57 1445 | 72 1830 | 72 1830 | 57 1445 | 72 1830 | 72 1830 | 84 2134 |
| Face Std. Flywheel | 18 455 | 15 380 | 13 330 | 15 380 | 15 380 | 18 455 | 18 455 | 18 455 | 13 330 | 13 330 | 18 455 | 13 330 | 13 330 | 20 510 |
| Stationary Jaw Length | 45 1145 | 53 1345 | 43 1090 | 57 1445 | 57 1445 | 57 1445 | 57 1445 | 68 1725 | 77 1956 | 77 1956 | 68 1725 | 90 2285 | 90 2285 | 113 2870 |
| Movable Jaw Length | 56 1420 | 65 1650 | 50 1270 | 63 1600 | 65 1650 | 65 1650 | 65 1650 | 75 1905 | 85 2160 | 85 2160 | 75 1905 | 98 2490 | 98 2490 | 129 3277 |

Design and specifications subject to change without notice.
 Design features may be covered by patents issued and/or patents applied for.

Jaw Crusher Capacity in tons and (metric tons)

| Jaw Size in. & (cm.) | | | | | 10 x 36 (25 x 91) 12 x 36 (30 x 91) 16 x 36 (41 x 91) 18 x 36 (46 x 91) | 22 x 36 (56 x 91) 24 x 36 (61 x 91) | | | (12 x 48) (30 x 122) 16 x 48 (41 x 122) 22 x 48 (59 x 122) | 25 x 42 (61 x 107) 64 x 42 (69 x 107) | 30 x 42 (76 x 107) 32 x 42 (81 x 107) | 42 x 48 (107 x 122) 57 x 48 (148 x 122) 36 x 48 (91 x 122) | | 36 x 60 (91 x 152) 54 x 60 (137 x 152) |
|-------------------------------------|----------------------|----------------------|----------------------|--|--|--|----------------------|-----------------------|---|--|--|---|-----------------------|---|
| Size Opening Closed Stroke | 10 x 16 (25 x 41) | 10 x 20 (25 x 50) | 10 x 24 (25 x 61) | 15 x 24 (38 x 61) 18 x 24 (46 x 61) | | | 24 x 38 (61 x 97) | 12 x 42 (30 x 107) | | | | | 30 x 54 (76 x 137) | |
| ¾" | 10-20 | 10-25 | 15-25 | | | | | | | | | | | |
| 19mm | (9-18) | (9-23) | (14-23) | | | | | | | | | | | |
| 1" | 15-25 | 20-30 | 25-35 | | | | | | | | | | | |
| 25.4mm | (14-23) | (18-27) | (23-32) | | | | | | | | | | | |
| 1½" | 25-35 | 25-45 | 35-50 | 35-50 | 55-75 | | | 60-90 | 70-100 | | | | | |
| 38.1mm | (23-32) | (23-41) | (32-45) | (32-45) | (36-68) | | | (54-81) | (63-90) | | | | | |
| 2" | 30-45 | 40-55 | 50-70 | 50-70 | 70-100 | | | 85-115 | 115-130 | | | | | |
| 50.8mm | (27-41) | (36-50) | (45-63) | (45-63) | (63-90) | | | (77-100) | (104-117) | | | | | |
| 2½" | 40-55 | 50-70 | 60-85 | 60-85 | 95-125 | 95-125 | | 105-145 | 125-165 | | | | | |
| 63.5mm | (36-50) | (45-63) | (54-77) | (54-77) | (86-113) | (86-113) | | (95-131) | (113-149) | | | | | |
| 3" | 50-70 | 60-85 | 70-100 | 70-100 | 110-150 | 110-150 | | 125-175 | 150-200 | | | | | |
| 76.2mm | (45-63) | (54-77) | (63-90) | (63-90) | (99-135) | (99-135) | | (113-158) | (135-180) | | | | | |
| 3½" | 60-80 | 70-100 | 85-115 | 85-115 | 125-175 | 125-175 | | 155-205 | 180-230 | 155-205 | | | | |
| 88.9mm | (54-72) | (63-90) | (77-104) | (77-104) | (113-158) | (113-158) | | (140-185) | (162-207) | (140-185) | | | | |
| 4" | | | | 100-130 | 150-200 | 150-200 | | 175-225 | 210-260 | 175-225 | 175-225 | 210-260 | 235-285 | 265-315 |
| 101.6mm | | | | (90-117) | (135-180) | (135-180) | | (158-203) | (189-234) | (158-203) | (158-203) | (189-234) | (212-257) | (239-284) |
| 4½" | | | | 110-150 | 170-220 | 170-220 | 180-230 | 200-260 | 230-290 | 200-260 | 200-260 | 230-290 | 260-320 | 295-355 |
| 114.3mm | | | | (99-135) | (153-198) | (153-198) | (162-207) | (180-234) | (207-261) | (180-234) | (180-234) | (207-261) | (234-288) | (266-320) |
| 5" | | | | 120-170 | 190-250 | 190-250 | 200-260 | 225-285 | 260-320 | 225-285 | 225-285 | 260-320 | 295-355 | 335-395 |
| 127.0mm | | | | (108-153) | (171-225) | (171-225) | (180-234) | (203-257) | (234-288) | (203-257) | (203-257) | (234-288) | (266-320) | (302-356) |
| 6" | | | | | | 230-300 | 240-320 | | 310-390 | 260-340 | 260-340 | 310-390 | 355-435 | 400-480 |
| 152.4mm | | | | | | (207-270) | (216-288) | | (279-351) | (234-306) | (234-306) | (279-351) | (320-392) | (360-432) |
| 7" | | | | | | | 285-365 | | | 320-400 | 320-400 | 370-450 | 420-500 | 470-550 |
| 177.8mm | | | | | | | (257-329) | | | (288-360) | (288-360) | (333-405) | (378-450) | (423-495) |
| 8" | | | | | | | 320-420 | | | 350-450 | 350-450 | 415-515 | 475-575 | 530-630 |
| 203.2mm | | | | | | | (288-378) | | | (315-405) | (315-405) | (374-464) | (428-518) | (477-567) |
| 10" | | | | | | | | | | 460-560 | 460-560 | 530-630 | 605-705 | 680-780 |
| 254mm | | | | | | | | | | (414-504) | (414-504) | (477-567) | (545-635) | (612-702) |
| 12" | | | | | | | | | | | 560-660 | 650-750 | 740-840 | 830-930 |
| 304.8mm | | | | | | | | | | | (504-594) | (585-675) | (666-756) | (747-837) |

All capacities are based on 100 lbs. per cu. ft. (1602 kg/m³) weight of rock. Tonnage may vary depending on particle size of feed, rate of feed, proper operating conditions, breaking characteristics and compressing strength of rock. Type of jaw faces and horsepower used can also affect capacity.



To set FA, EP, or E style jaws, use a piece of wood cut to correct size and set between jaws as shown.

Design and specifications subject to change without notice.
Design features may be covered by patents issued and/or patents applied for.

Jaw Crusher

Features

- Submerged arc welded all-steel base (thermally stress relieved in oven at 1400°F).
- Side bearings directly over side plates.
- Independent side bearing housings.
- Minimum bearing center distance to eliminate flexing.
- Spherical, self-aligning roller bearings to handle side thrush.
- Positive, maintenance-free labyrinth seals to keep out dust.
- Oil/grease lubrication - large sizes for more positive lubrication.
- Drop forged, heat treated 4340 chrome-nickel-steel alloy shafts.
- Massive, large diameter split hub flywheels (most sizes) to maintain inertia and remove easily.
- Cast steel pitman with machined surfaces for highest strength.
- Several Manganese jaw plate choices.
- Steep toggle plate for aggressive crushing action.
- Hydraulic-shim adjustment.
- Two convertible rip-rap crushers (4242-3242 & 5748-4248).
- Widest range of crusher sizes (26 total).
- Optional hydraulic toggle for quick adjustment and high pressure relief.

Jaw Crusher Calculated Weights

| Model | Complete Total | Complete Pitman Assembly | Flywheel Only (Each) |
|-------|----------------|--------------------------|----------------------|
| 1016 | 5,306 | 2,844 | 690 |
| 1024 | 8,255 | 4,817 | 1,275 |
| 1036 | 12,551 | 7,449 | 1,223 |
| 1236 | 13,978 | 8,007 | 1,250 |
| 1242 | 19,521 | 12,120 | 2,098 |
| 1248 | 24,300 | 14,374 | 2,175 |
| 1524 | 12,305 | 6,771 | 1,215 |
| 1636 | 21,003 | 11,895 | 2,075 |
| 1642 | 33,998 | 19,642 | 2,741 |
| 1648 | 32,406 | 16,988 | 2,684 |
| 1824 | 12,426 | 6,771 | 1,215 |
| 1836 | 21,280 | 12,105 | 2,126 |
| 2236 | 24,903 | 14,266 | 2,785 |
| 2248 | 43,094 | 25,746 | 3,700 |
| 2436 | 46,737 | 22,861 | 3,462 |
| 2438 | 42,695 | 21,832 | 3,509 |
| 2540 | 45,000 | 18,950 | 4,200 |
| 2542 | 42,095 | 21,832 | 3,584 |
| 2742 | 45,992 | 24,416 | 3,675 |
| 3042 | 48,520 | 25,842 | 4,194 |
| 3054 | 52,740 | 27,525 | 4,194 |
| 3242 | 57,137 | 28,755 | 4,028 |
| 3648 | 79,653 | 39,524 | 5,560 |
| 3660 | 107,664 | 58,478 | 5,595 |
| 4242 | 58,838 | 28,755 | 4,028 |
| 4248 | 104,567 | 52,827 | 5,595 |
| 5460 | 196,258 | 102,715 | 10,570 |
| 5748 | 117,000 | 52,827 | 5,595 |

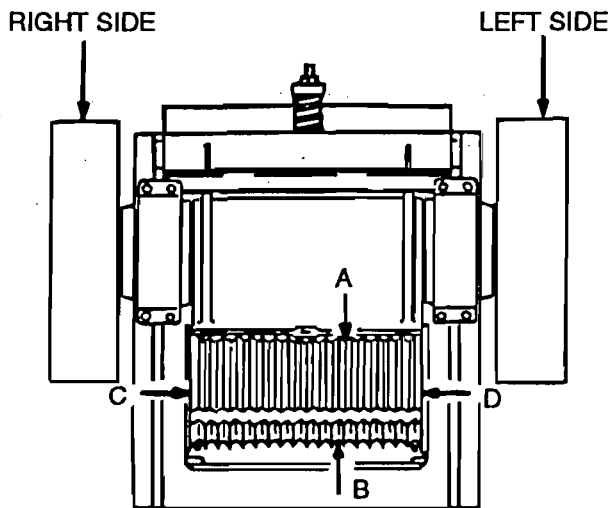
Service Technical Information

Figure 1
Jaw Crusher Opening

Right & Left Side

Right and left side of crusher are determined when standing facing the tension springs. (Figure 1)

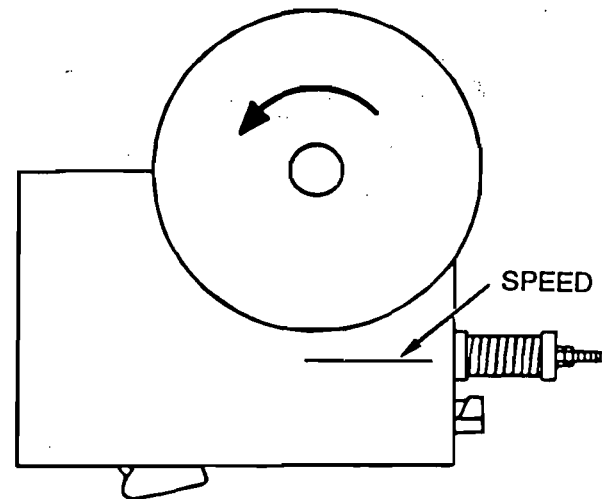


Figure 2
Direction of Rotation

Table 1
Recommended Openings at Closed Stroke (Inches & mm)

| Size | Minimum | | Maximum | | RPM Range |
|------|---------|-----|---------|-----|-----------|
| | Inches | mm | Inches | mm | |
| 1016 | 3/4 | 19 | 3-1/2 | 89 | 250-300 |
| 1020 | 3/4 | 19 | 3-1/2 | 89 | 250-300 |
| 1024 | 3/4 | 19 | 3-1/2 | 89 | 250-300 |
| 1036 | 1-1/2 | 38 | 3-1/2 | 89 | 250-300 |
| 1236 | 1-1/2 | 38 | 5 | 127 | 250-300 |
| 1242 | 1-1/2 | 38 | 5 | 127 | 250-300 |
| 1248 | 1-1/2 | 38 | 5 | 127 | 250-300 |
| 1524 | 1-1/2 | 38 | 5 | 127 | 250-300 |
| 1636 | 1-1/2 | 38 | 5 | 127 | 250-300 |
| 1648 | 1-1/2 | 38 | 5 | 127 | 250-300 |
| 1824 | 1-1/2 | 38 | 5 | 127 | 250-300 |
| 1836 | 1-1/2 | 38 | 5 | 127 | 250-300 |
| 2236 | 2-1/2 | 64 | 6 | 152 | 250-300 |
| 2248 | 2-1/2 | 64 | 6 | 152 | 225-275 |
| 2436 | 2-1/2 | 64 | 6 | 152 | 225-275 |
| 2438 | 4-1/2 | 114 | 8 | 203 | 250-300 |
| 2442 | 3-1/2 | 89 | 10 | 254 | 225-275 |
| 2742 | 3-1/2 | 89 | 10 | 254 | 225-275 |
| 3042 | 4 | 102 | 13 | 330 | 225-275 |
| 3054 | 4 | 102 | 13 | 330 | 225-275 |
| 3242 | 4 | 102 | 13 | 330 | 225-275 |
| 3648 | 4 | 102 | 13 | 330 | 200-250 |
| 4242 | 14 | 355 | 23 | 584 | 225-275 |
| 4248 | 4 | 102 | 13 | 330 | 200-225 |
| 5460 | 6 | 152 | 20 | 508 | 200 |
| 5748 | 19 | 483 | 28 | 711 | 200-225 |

Table 2
"All Grease" Lubrication Capacities (Lbs. Required)

| Crusher Size | Each Side Bearing | Pitman Bearings |
|--------------------------|-------------------|-----------------|
| 1016 | 2 | 4 |
| 1020 | 2 | 5 |
| 1024 | 2 | 8 |
| 1036 | 2 | 14 |
| 1236 | 2 | 18 |
| 1524, 1824 | 3 | 8 |
| 1536, 1636, 1836 | 6 | 25 |
| 2236 | 4 | 23 |
| 1242 | 4 | 27 |
| 1248 | 4 | 32 |
| 2540, 2442 | 7 | 33 |
| 2436 | 12 | 29 |
| 1648 | 9 | 38 |
| 2640, 3040, 1642 | 10 | 48 |
| 3042, 3242 4242, 3054 | 10 | 48 |
| 2248 | 8 | 55 |
| 2742 | 10 | 47 |
| 3648 | 12 | 64 |
| 4248, 5748 | 9 | 51 |
| 5460 | 31 | 153 |

General Information**Pitman Assembly Procedure**

All pitman and side bearing end cap bolts are to be of the self-locking type and **Loctite #271 is also to be applied.** Then tighten bolts to correct torque.

All seals with grooved lands should be packed with proper grease when assembling. After assembly, purge seal on grease lubricated unit. Remove grease fitting for seals and install plugs.

Removing Clearance from Straight Bore Pitman Bearings:

Be sure no more than 50% of the unmounted clearance is removed after the bearings have cooled and shrunk in place on the shaft.

Removing Clearance from Tapered Side Bearings:

Remove between 40% and 50% of the unmounted clearance, no more.

Example: Unmounted (bench) clearance = .010. 40% = $.010 \times (.4) = .004$; 50% = $.010 \times (.5) = .005$. .010 minus .004 = .007; .010 minus .005 = .005

Record all unmounted and mounted clearances for future reference.

Jaw Crusher Lubrication

Proper lubrication for jaw crusher should follow guidelines established in our current Cedarapids 010 Operation Manual until notified differently by Engineering.

Be sure to add 20% grease just like new unit is an overhaul.

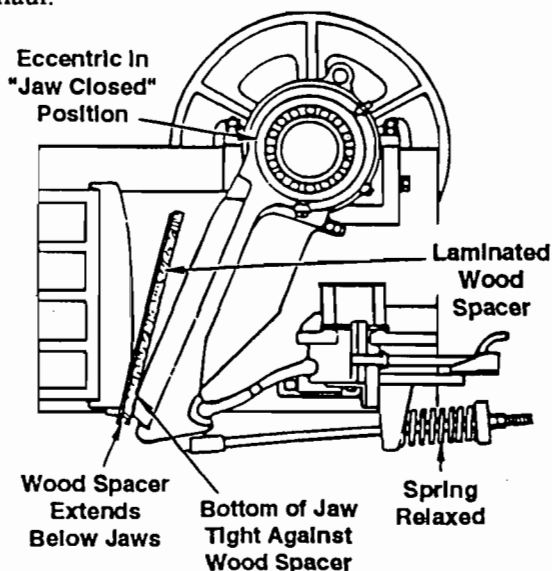


Figure 3
Jaw Cross-section Cut-away View

Setting Discharge Opening

To set the discharge opening between jaws to obtain the desired product size range:

- 1) When the crushing chamber is completely empty, stop the crusher drive and lock out the power source so no unexpected movement of the flywheel can occur.
- 2) Loosen nuts that hold base toggle seat.
- 3) Loosen tension spring nuts so shim pack can be adjusted.
- 4) Make a wooden spacer similar to Figure 7, to the exact thickness of the correct discharge opening. When lumber of proper width or thickness is not available, make up a lamination, including plywood, hard fibre board, or metal to obtain the correct thickness. Spacer must be wide enough to bridge between several jaw plate tips shown in Figures 5 & 6. **This is especially important when setting the specified minimum discharge opening!**
- 5) Turn the flywheel so that eccentric shaft closes the jaws as much as possible.
- 6) Hold the wooden spacer so that it is centered in the crushing chamber and extends below jaws. (Figures 3 & 4)
- 7) Force the bottom of the movable jaw tight against the wood spacer. Adjust shim packs uniformly to fix toggle seat in that position. (On some models this is done with a mechanical linkage)
- 8) Tighten nuts with hold base toggle seat.
- 9) Tighten tension spring nuts to restore holding force on toggle plate.

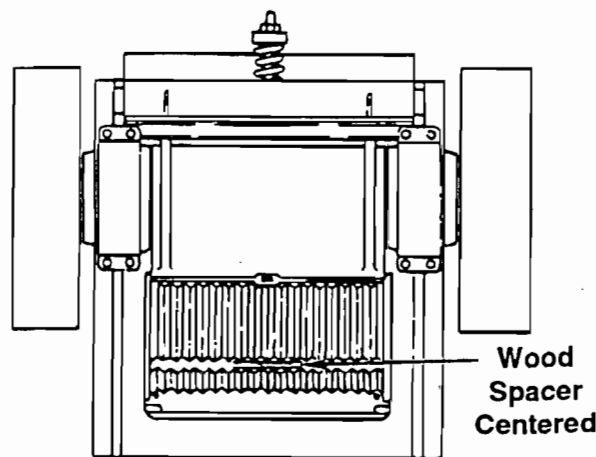
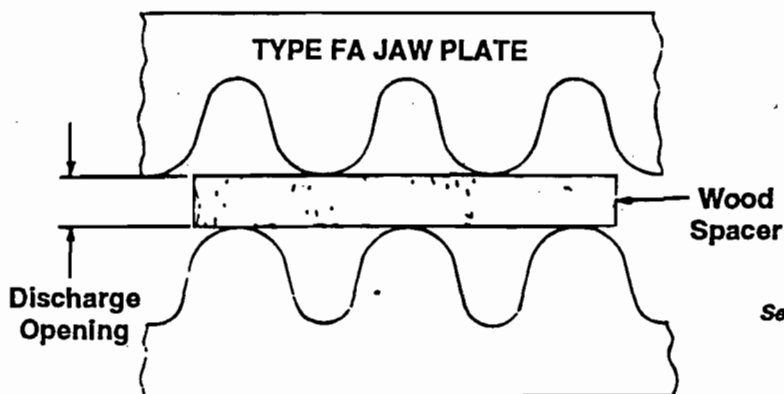
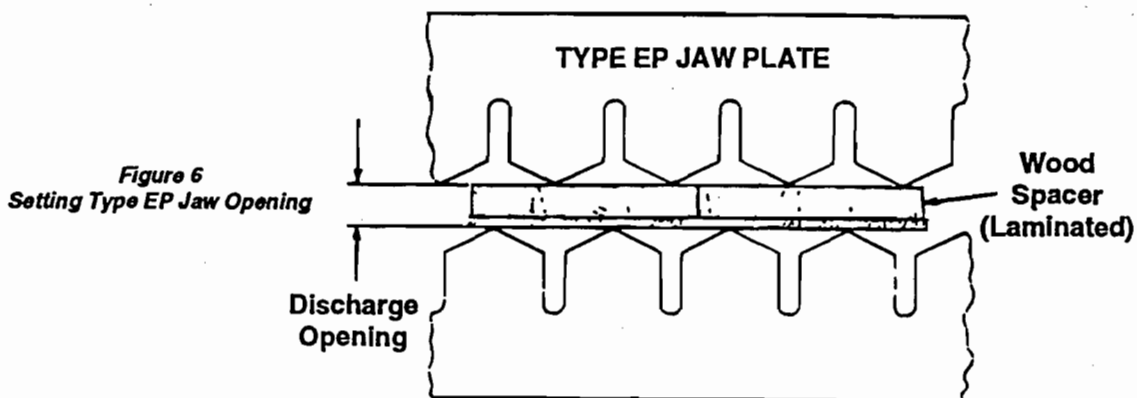


Figure 4
Jaw Top View

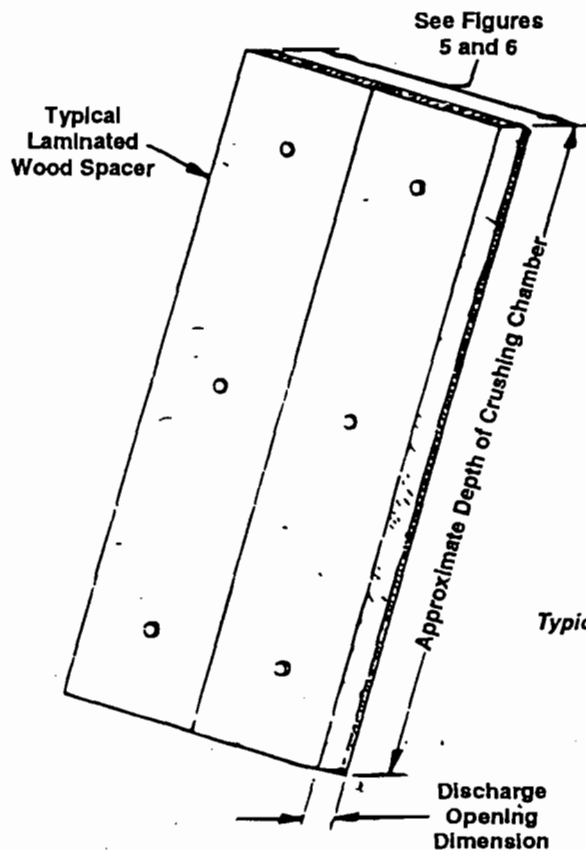
General Information



*Figure 5
Setting Type FA Jaw Opening*



*Figure 6
Setting Type EP Jaw Opening*



*Figure 7
Typical Laminated Spacer*

General Information**Jaw Crusher Adjustment Procedure**

Caution! *Never adjust crusher when it is being operated.*

- 1) Loosen tension rods and spring assembly.
- 2) Loosen adjustable toggle plate seat wedges.
- 3) Install hydraulic ram(s) and pump.
- 4) Using a piece of wood the thickness of the desired opening hanging down to the bottom of the crushing chamber.
- 5) Pump the hydraulic rams to move the pitman toward the stationary jaw till block of wood is tight against both jaw plates.
- 6) Remove or install as required the necessary shims behind the adjustable toggle plate seals.

NOTE: *Be sure shims are equal on both sides.*

- 7) Release the hydraulic pressure - this will allow the pitman to retract forcing the shims tight against the base.
- 8) Retension the tension springs equally to insure the pitman, toggle plate and adjustable seat are all tight, one against the other.
- 9) Retension the adjustable toggle plate seat wedges.

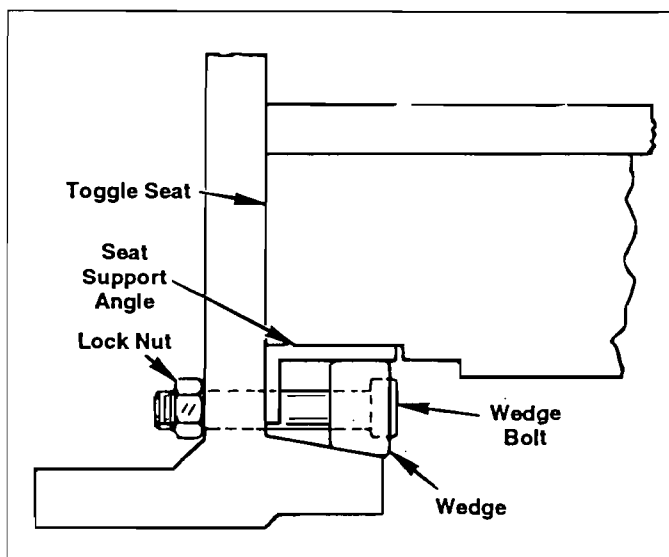


Figure 8
End View of Toggle Seat Wedge Assembly

Jaw Plates Installation**Base Stationary Jaw Plates & Key Plates**

- 1) Stationary jaw machined surface must be checked for flatness both crosswise and top to bottom. In general, it should be within $\frac{1}{16}$ ", however, it will vary with each size crusher. Key plates should be checked in the same manner.
- 2) Stationary jaw must be centered in base and must be held tight against the bottom end of the base while in this position.
- 3) Lower key plates are installed and then a $\frac{3}{4}$ " or 1" spacer bar is set on top of the lower key plate and the upper key plate is installed.
- 4) Using a minimum of 16 lb. sledge hammer, you drive on the upper key plate forcing the lower key plate down tight in place.
- 5) A properly fitting key plate will have a minimum of 70% contact between the base guide and the ear of the jaw plate. The bolts which hold the key plates in the base should be halfway between the upper $\frac{3}{4}$ of the slotted hole in the base. At no time should the bolts contact either end of the base hole.
- 6) After the lower key plates are in position, remove the spacer and drive the upper key plates into position following the guidelines for contact and bolt locations in Step 5. All bolts should be torqued for proper tension. Refer to standard bolt torque chart and follow (lube) recommendation.

NOTE: *It may require grinding of key plates to properly fit as described above.*

- 7) With steps five and six completed, install the required shims under the upper lip of the jaw plate and base and weld the shim to the base. Refer to Print No. 3645-049-01.
- 8) After operating crusher for eight hours, recheck bolt tension. Retension bolts as required until they remain tight.

Pitman Plate & Jaw Wedge

- 1) Movable jaw machined surface must be checked for flatness crosswise and top to bottom in general. It must be with $\frac{1}{16}$ ", however, it will vary with each size crusher.
- 2) The pitman lip must be smooth for the jaw plate to fit evenly and tight against the lip.

General Information

- 3) The movable jaw plate must be centered on the pitman.

NOTE: This may require trimming pitman sides or ears.

- 4) Install the pitman jaw wedge. Be sure it does not extend beyond the end of the pitman, restricting the pitman side float.
- 5) Install the keeper bolts to hold the wedge in place and their lock nuts and washer.
- 6) Using a minimum 16 lb. sledge hammer, you must drive on the face of the wedge starting in the center and working toward both ends to seat the wedge. While driving on wedge, a person is to be tightening the bolts and nuts in the same area.

NOTE: Do not drive on the heads of the bolts!

All bolts should be torqued for proper tension. Refer to standard bolt torque chart and follow (lube) recommendation.

- 7) After operating crusher for eight hours, recheck bolt tension. Retension both as required until they remain tight.

NOTE: The wedge should never bottom out against the pitman nor should the top of the wedge be in further than the pitman barrel. In either case, add a shim to top of wedge same width and length as wedge to correct.



Caution! When welding mild steel lifting loops to Manganese jaw plates or key plates, American Welding Society standards are to be followed as summarized:

- Stainless 310 rod $\frac{3}{8}$ diameter. A number of passes should be used rather than one large pass.
- No preheating or after welding heating to be done.
- Follow all safety precautions whenever lifting items.

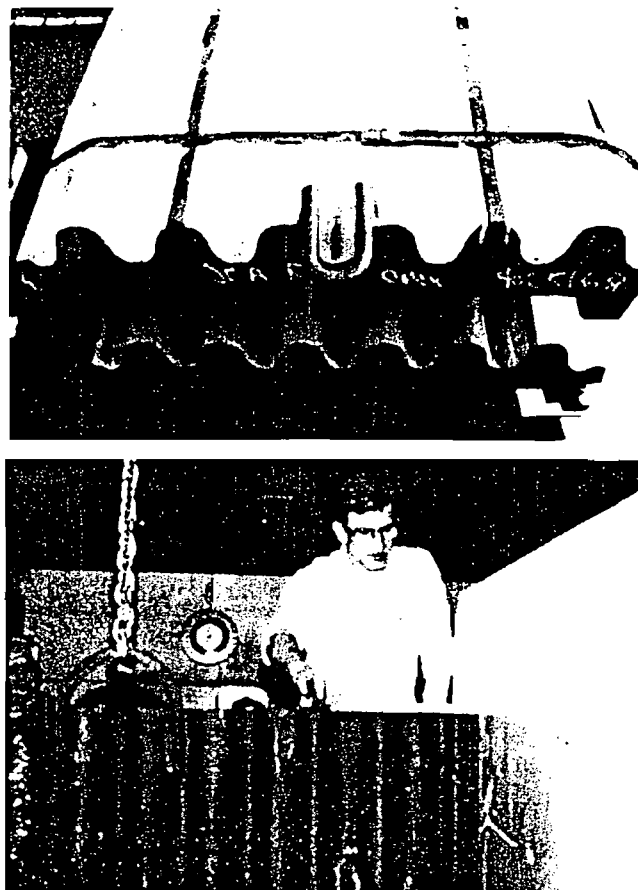


Figure 9
Proper Use of Lifting Loop on Jaw Plate

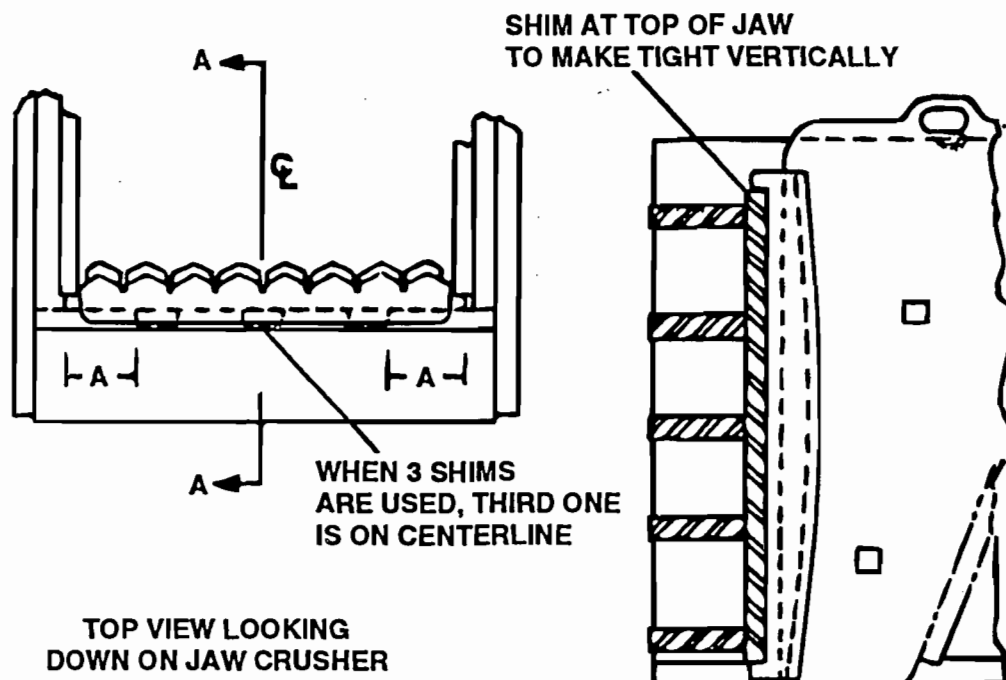
Shim Locations

Figure 10
Top View of Jaw Crusher for Shim Location

| Size | A | Shim Places | Shim Group |
|------|----|-------------|------------|
| 1016 | 3" | 2 | I |
| 1020 | 3" | 2 | I |
| 1024 | 5" | 2 | I |
| 1524 | 5" | 2 | I |
| 1824 | 5" | 2 | I |
| 1036 | 5" | 3 | I |
| 1236 | 5" | 3 | I |
| 1536 | 5" | 3 | I |
| 1636 | 5" | 3 | I |
| 1836 | 5" | 3 | I |
| 2236 | 5" | 3 | II |
| 2436 | 5" | 3 | II |
| 2442 | 5" | 3 | II |
| 2742 | 5" | 3 | II |
| 3046 | 5" | 3 | II |
| 1242 | 5" | 3 | I |
| 3042 | 5" | 3 | II |
| 3242 | 9" | 2 | III |
| 4242 | 9" | 2 | III |
| 3645 | 5" | 3 | III |
| 1648 | 7" | 3 | I |
| 2248 | 7" | 3 | II |
| 4248 | 5" | 3 | III |
| 1248 | 7" | 3 | I |
| 2438 | 5" | 3 | II |
| 1642 | 5" | 3 | II |
| 5460 | 7" | 3 | IV |
| 3054 | 6" | 3 | IV |
| 3660 | 7" | 3 | IV |

| Part # | Description |
|-----------------------|---------------------------|
| Shim Group I | |
| 41306-001 | 1/4" FL x 2-1/2" x 1" LG |
| 41314-001 | 5/16" FL x 2-1/2" x 1" LG |
| 41321-001 | 3/8" FL x 2-1/2" x 1" LG |
| 41335-001 | 1/2" FL x 2-1/2" x 1" LG |
| Shim Group II | |
| 41306-002 | 1/4" FL x 2-1/2" x 2" LG |
| 41314-002 | 5/16" FL x 2-1/2" x 2" LG |
| 41321-002 | 3/8" FL x 2-1/2" x 2" LG |
| 41335-002 | 1/2" FL x 2-1/2" x 2" LG |
| Shim Group III | |
| 41307-004 | 1/4" FL x 3" x 4" LG |
| 41315-004 | 5/16" FL x 3" x 4" LG |
| 41322-004 | 3/8" FL x 3" x 4" LG |
| 41336-004 | 1/2" FL x 3" x 4" LG |
| Shim Group IV | |
| 41307-006 | 1/4" FL x 3" x 6" LG |
| 41315-006 | 5/16" FL x 3" x 6" LG |
| 41322-006 | 3/8" FL x 3" x 6" LG |
| 41336-006 | 1/2" FL x 3" x 6" LG |

Jaw Crusher Toggle Plate Changing Procedure

Caution! *Never adjust toggle plate setting when crusher is being operated.*

- 1) Install chain through the center hold of the toggle plate and feed it up between the pitman and the base.
- 2) Connect chain to come-along and snug up chain just so it doesn't fall back down.
- 3) Loosen the tension rod and spring assembly.
- 4) Loosen adjustable toggle plate seat wedges.
- 5) Install hydraulic rams and pump assembly.
- 6) Pump rams to push seat forward far enough to remove shims.
- 7) Release hydraulic pressure - this will allow the pitman to push the seat back.
- 8) Remove hydraulic ram(s) and relocate upper position in order to push the pitman end toward the stationary jaw.
- 9) Pump ram(s) far enough so the toggle plate drops free of the pitman.
- 10) For safety, put hard block of wood between pitman and base.
- 11) Lower the toggle plate down to the tension rods.
- 12) Lower tension rods down on to the conveyor and remove springs.
- 13) Let the toggle plate all the way down on to tension rods.
- 14) Pull plate out from under the crusher. To install new toggle plate, slight the new plate under the crusher on the tension rod.
- 15) Feed the chain backup between pitman and base and hood chain on to the come-along.
- 16) Raise the toggle plate up into the adjustable seat.
- 17) Remove the wooden block between pitman and base.
- 18) Slowly release hydraulic pressure to let pitman come back and adjust come-along as required to line toggle plate up with pitman seat.

Changing Toggle Plate

- 19) Remove ram(s) from upper position and reinstall in position to adjust crusher setting.
- 20) Raise the tension rods up in to position and install the springs and snug up assembly.
- 21) Use block of wood for desired setting of crusher and hang it down to bottom of crushing chamber.
- 22) Adjust crusher until the block of wood is tight between the pitman jaw and stationary jaw.
- 23) Install required equal amount of shims on both sides.
- 24) Release hydraulic pressure on rams. This will allow the pitman to retract forcing the shims tight against the base.
- 25) Retension the tension springs equally to insure the pitman, toggle plate and adjustable seat are all tight one against the other.
- 26) Retension the adjustable toggle plate seat wedges.



Caution! *Never operate the crusher with the hydraulic cylinders under pressure.*

NOTE: *If you hear or see the toggle plate slapping in its seats, the tension rod and spring assemblies must be retensioned more.*

Cedarapids

A Raytheon Company

Installation of Jaw Pitman Assembly into Base

- 1) Install the toggle plate inside the base. Use a chain through the center hole to suspend the toggle plate in the base. Make sure the chain can be dropped out through the hole after the pitman is installed.
- 2) Hook a crane to the pitman at the top and the bottom so that when the pitman is hoisted, it will be held at an angle of around 15 to 20 degrees from end to end and level horizontally from side to side. Crane(s) must be adequate for the weight of the pitman.
- 3) Lower the pitman into the base. Be careful not to bang the side of the bearing housing into the base seats.
- 4) When the bearing is 1 or 2 inches from being seated, install the bearing bolts on the bottom and top.
- 5) Start the back bearing bolts. Disconnect the chain on the top of the pitman.
- 6) Before unhooking the lower chain from the pitman, lift the pitman and raise the toggle plate into position. Then remove the chain.
- 7) Tighten the bearing housing to the base. Tighten the back bolts first (the tension spring end). This draws the side bearing housing to the rear. Tighten the

bottom bolts second. This ensures the assembly is down tight. Tighten the top bolts last in a corner-to-corner or criss-cross pattern.

- 8) Torque all housing bolts to the recommended value.
- 9) Check and record the clearance between the outside rotating seal and the side bearing end cap for future reference. This clearance should be very close to equal all the way around.
- 10) Install the tension rods and spring assemblies. Compress both springs evenly until there is no looseness between the pitman seat, the toggle plate, and the adjustable seat.

- 11) Install the flywheels onto the shaft.

Note: Be sure the counterweights on the flywheels are in line from side to side and ahead of the leading spoke as it rotates down into the closed stroke.

- 12) Tighten the shaft's end cap bolts first to push the flywheels onto the shaft.

- 13) Tighten the flywheel hub bolts last.

Note: Number 12 and number 13 bolts should be torqued to the recommended value of the torque chart, using the "LUBE" column of the chart.

| Size | Old Part # | Description | New Part # | Description | Qty. |
|------|-------------|------------------------------|------------|-----------------------|------|
| 2236 | 7146-196 | 1-1/4" N.C. x 15" | 7383-324 | 1-1/4" N.C. x 16" | 8 |
| 2542 | 7146-196 | 1-1/4" N.C. x 15" | 7383-324 | 1-1/4" N.C. x 16" | 8 |
| 2742 | 7146-196 | 1-1/4" N.C. x 15" | 7383-324 | 1-1/4" N.C. x 16" | 8 |
| 3042 | 7146-196 | 1-1/4" N.C. x 15" | 7383-324 | 1-1/4" N.C. x 16" | 8 |
| 3054 | 7146-196 | 1-1/4" N.C. x 15" | 7383-324 | 1-1/4" N.C. x 16" | 8 |
| 3242 | 7146-196 | 1-1/4" N.C. x 15" | 7383-324 | 1-1/4" N.C. x 16" | 8 |
| 4242 | 7146-196 | 1-1/4" N.C. x 15" | 7383-324 | 1-1/4" N.C. x 16" | 8 |
| 3648 | 3645-049-02 | 1-1/2" N.C. x 19" (Stud) | 7383-325 | 1-1/2" N.C. x 18-1/2" | 8 |
| 3660 | 3645-049-02 | 1-1/2" N.C. x 19" (Stud) | 7383-325 | 1-1/2" N.C. x 18-1/2" | 8 |
| 4248 | 3645-049-02 | 1-1/2" N.C. x 19" (Stud) | 7383-325 | 1-1/2" N.C. x 18-1/2" | 8 |
| 5460 | 4248C04 | 1-1/2" N.C. x 21-1/2" (Stud) | 7383-326 | 1-1/2" N.C. x 20" | 8 |

Torque bolts per Standard Torque Chart. Use Lubricated column figure.

Jaw Crusher Shielding & Lubricating Pitman Toggle Plate & Seat to Reduce Wear

During jaw crusher operation, fine dust generated by the process accumulates on top of the toggle plate and works its way in between toggle plate and seat. The addition of lubricant to that area produces a combination of oil and dust which acts like a grinding compound to speed up the wearing of toggle plate and seat.

We recommend a burlap shield and oil wick that will trap the dust and bleed clean oil into the contact area so that wear is minimized.

- 1) Cut burlap strips, wide enough to nest in area above toggle seat, on low point of toggle plate as shown. Strips should be as long as the crushing chamber is wide.
- 2) Cut at least ten strips, laying them one on top of each other to form a laminated shield. Saturate the strips with old engine oil.
- 3) Install shield on top of pitman toggle seat and toggle plate contact area as shown.

Maintenance:

- 1) Check shield periodically.
- 2) When top strip is saturated with dust, carefully peel it off.
- 3) Add old motor oil to shield after each top strip is removed.
- 4) Remove entire shield before the last two strips are removed.

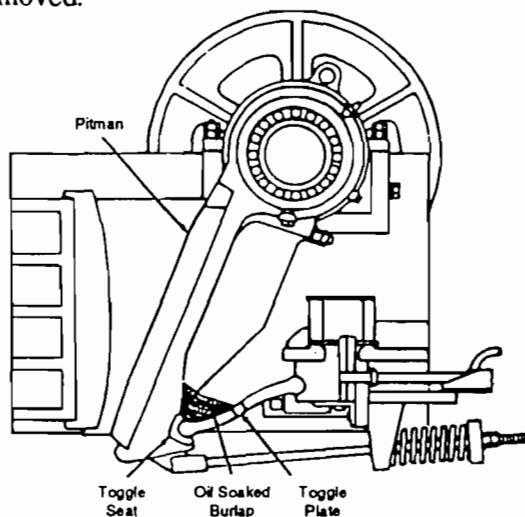


Figure 11
Cut-away Side View of Typical Jaw Crusher
with Burlap Dust Shield

Pitman Information

Pitman Assembly Procedure

- 1) All pitman and side bearing end cap bolts are to be of the self locking type and Loctite #271 is also to be applied. Then tighten bolts to correct torque.
- 2) All seals with grooved lands should be packed with proper grease when assembling. After assembly, purge seal on grease lubricated unit, then remove grease fitting for seals and install plugs.
- 3) In removing clearance from bearings follow these guidelines:

Straight Bore Pitman Bearings: Be sure no more than 50% of the unmounted clearance is removed after the bearings have cooled and shrunk in place on the shaft.

Tapered Side Bearings: Remove between 40 and 50% of the unmounted clearance, no more.

Example: Unmounted bench clearance = .010; 40% = $.010 \times 0.4 = .004$; 50% = $.010 \times 0.5 = .005$; Then $.010 - .004 = .006$; $.010 - .005 = .005$. Record all unmounted and mounted clearances for future reference.

- 4) Proper lubrication for jaw crusher should follow guidelines established in IMCO 010 Operation & Maintenance Manual until notified differently by factory.

Be sure to add 20% grease just like new unit in an overhaul.

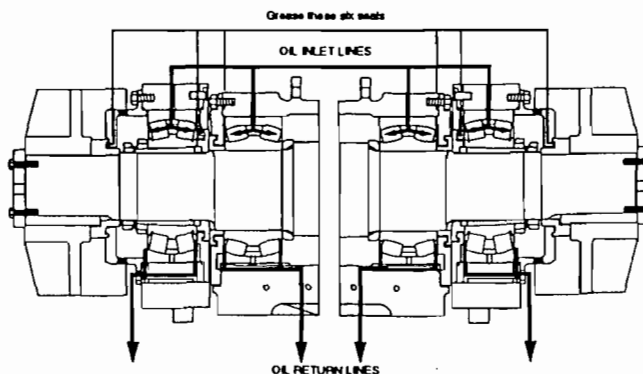


Figure 12
Pitman Oil Lubricating System

Lubrication

Pitman and Side Bearings: Fill supply tank with recommended lubricants. See Operation Manual for the oil capacity. **Lubricant:** Extreme pressure type oil. Typical brand names are, Amoco Amogear EP (220) [150], Mobil Mobilgear (630) [629], Exxon Spartan EP

Pitman Information

(220) [150], Shell Omala (220) [150], Gulf EP Lube HD (220) [150], Texaco Meropa (220) [150]

Ambient Oil Temperature Guide: (Above 32°F) [Below 32° F]

Use ISO Viscosity Grade 68 of primary lubricant for flushing.

Every 1000 hours, drain the supply tank and fill with flushing oil. Proceed with flushing operation. See specific instruction in the Operation Manual.

Grease Fittings: Dust & Moisture seals. Grease must extrude from seals at all times to produce an effective dust and moisture seal. Greasing intervals must be established to maintain this visible grease slick. **Lubricant:** Lithium base, grade 2 grease.

Contaminants in Lubricants

The following is a guide to levels of contaminants in lubrication. This is the concerned range measured in parts per million (ppm).

Iron: 125-150, Chrome: 25-30, Aluminum: 45-50, Copper: 100-125, Silicon: 25-30, Water: 0.

Oil is to be changed every 1000 hours. (Shorter intervals if at elevated temperature or continuous operation)

Refer to Cedarapids Operation & Maintenance Manual for bearing grease capacities and other detailed lubrication instructions.

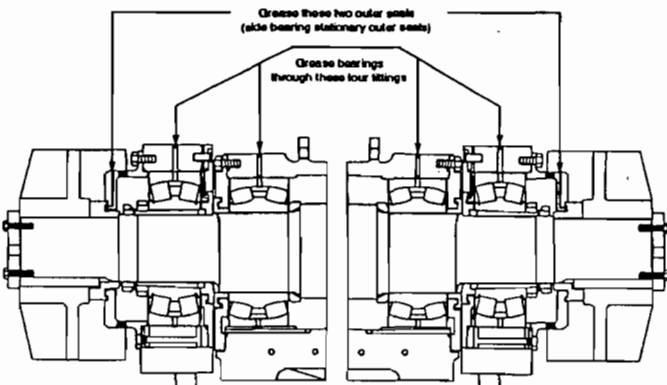


Figure 13
Grease Fittings on Pitman

Pitman Grease Fittings

Pitman and Side Bearings: Grease must extrude from seals at all times to produce an effective dust and moisture seal. Greasing intervals must be established to maintain this visible grease slick. Typical brand names are Amoco Amolith EP1, Gulf Gulfcrown EP1, Shell Alvania EP1, Exxon Lidok EP1, Mobil Mobilux EP1, Texaco Multifak EP1.

Refer to Cedarapids Operation & Maintenance Manual for bearing grease capacities and other detailed lubrication instructions.

Setting Oil Lubricating Flow Switches

- 1) Run the oil lubrication system without the crusher running.
- 2) Open flow switches all the way open.
- 3) Allow enough time for oil to warm up.
- 4) Adjust the three highest switches back down to the lowest switch setting.

Notes:

- As the higher ones are backed down the low ones will raise some.
- The flow switch brass indicator settings will vary with each size of crusher due to pump output.
- If indicator(s) begin to lower their preset position, it could indicate oil line problems or a bearing beginning to fail.
- If excessive oil leaks out of the seals, possible causes are: lack of grease in seals, return line blockage, return line has low area trapping oil fluid restricting flow to reserve or oil flow rate is too high and the flow rate indicator needs to be lowered.
- Oil is to be drained and flushed every 1000 hours of operation or seasonally, whichever occurs first.



Caution! Never operate oil lubricated crusher without the alarm system in operation.

Lubrication Instructions

Oil Lubrication for Combination Grease or Oil Lubricated Crusher

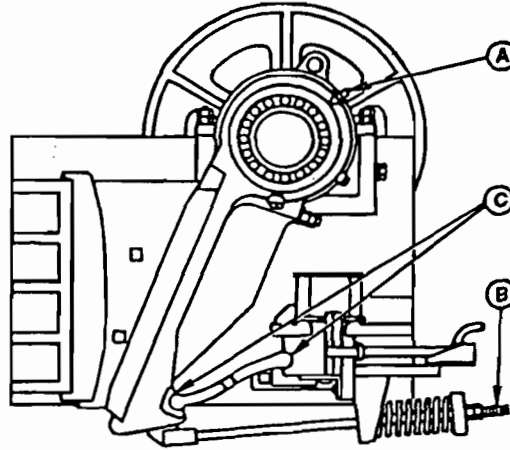


Figure 14
Side View – Location of Dust Barrier Grease Fittings & Oil Hoses

Grease these six seals

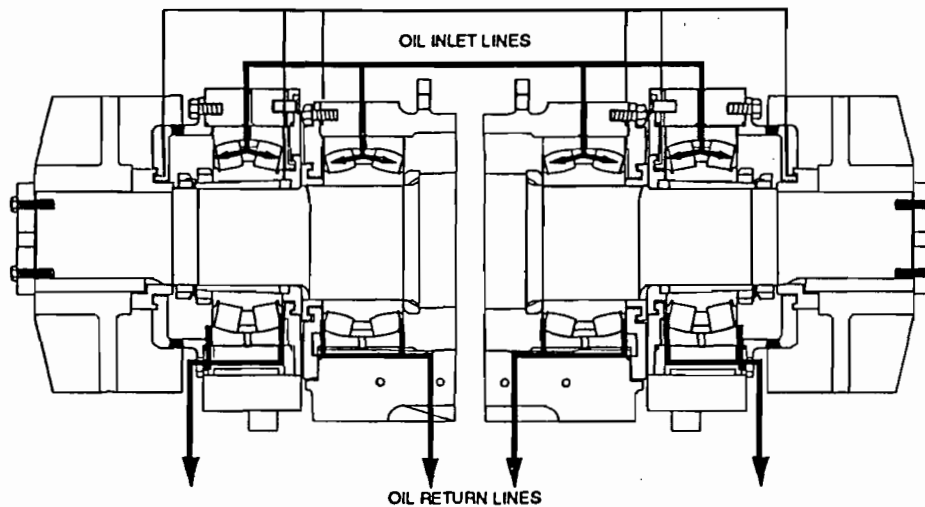
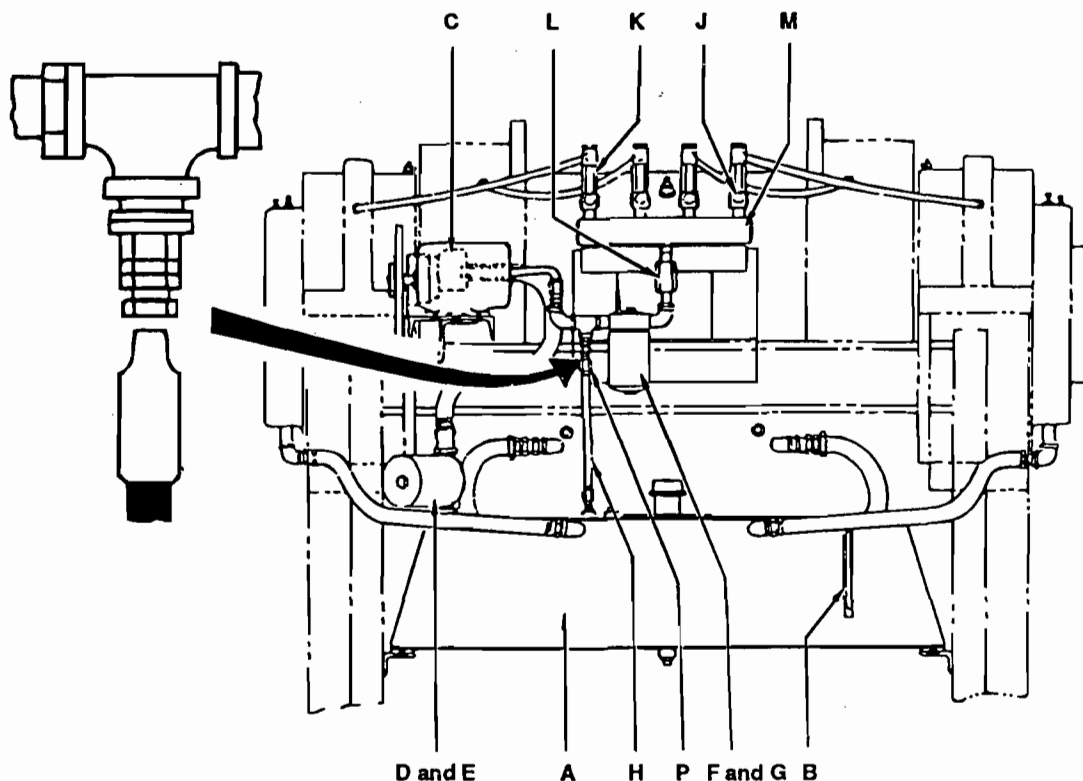


Figure 15
Cut-away Front View – Location of Dust Barrier Grease Fittings & Oil Hoses

| SYMBOL | PART | INSTRUCTIONS | LUBRICANT RECOMMENDED |
|--------|--|--|--|
| A | Side Bearing Seals, Pitman Seals (Dirt Barriers) | Check daily. Grease must extrude from the seals at all times to produce an effective dust and moisture seal. Greasing intervals must be established to maintain this visible grease slick. | Lithium base, Grade 2 grease |
| B | Tension Rod Threads | Lubrication with oil as needed. | SAE 30 motor oil |
| C | Toggle Plate | Lubricate at reassembly. | Lithium base, Grade 2 grease |
| D | Oil Circulation System | Every 1000 hours or seasonally, whichever occurs first. Drain when hot. Flush with at least 10 gallons flushing oil, run empty, drain and refill. | Amoco Amogear EP 220 or 150* Exxon Spartan EP 220 or 150* Gulf EP Lube HD 220 or 150* Mobil Mobilgear 630 or 629* Shell Omala 220 or 150* Texaco Meropa 220 or 150* *Use lower number for temperatures below freezing. |

**Circulating Oil System
Electric Oil Pump Drive****Figure 16****Circulating Oil System Components - Rear End View of Crusher with Electric Oil Pump Drive****Item Descriptions**

- A Oil reservoir
- B Level gauge
- C Oil pump
- D & E Suction filter with gauge
- F & G Discharge filter with gauge
- H Relief line
- J Pressure oiler
- K Flow indicator tube
- L Check valve
- M Oil manifold
- P Relief valve

Supply Tank & Level Gauge

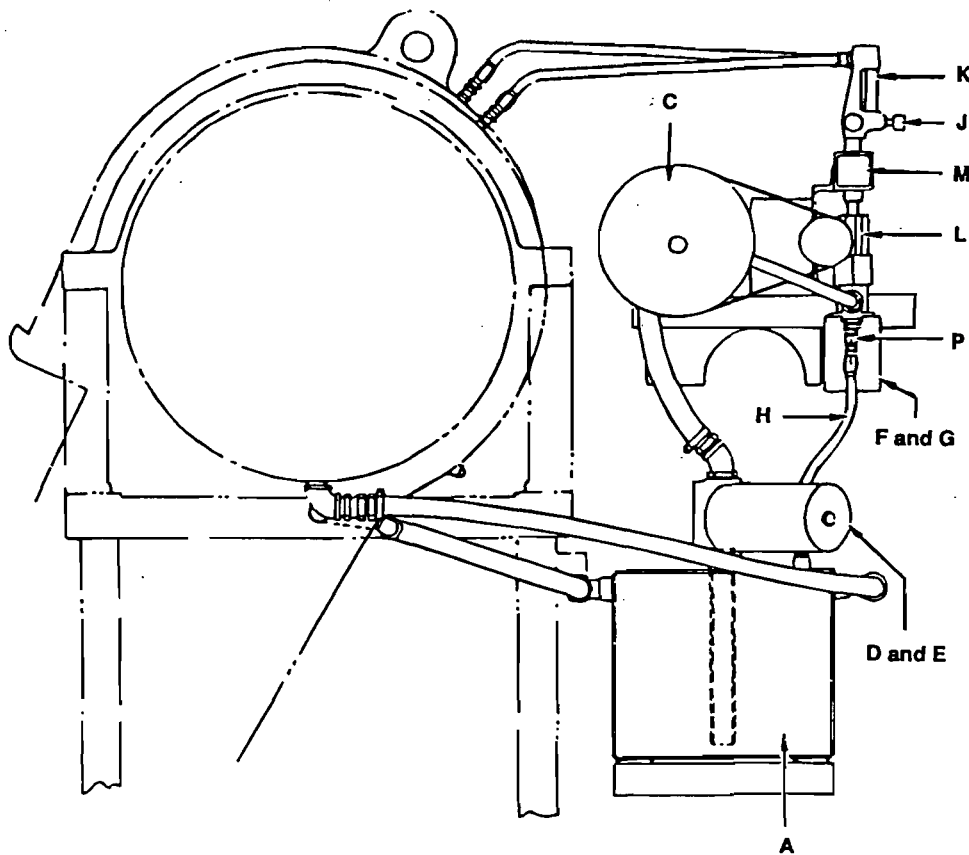
A large supply tank (A) for the oiling system is mounted on the crusher frame. It is set lower than the pitman shaft bearings so that oil draining from each bearing will return by gravity flow to the tank for re-circulation.



Caution! It is vital that all four drain hoses be without a low point where oil could collect and congeal during cold weather so that drainage back to the supply tank would be slowed or blocked.

A sight gauge (B) on the side of the tank shows the level of oil. The tank size is dependent upon the crusher size as follows: 3648, 4248, 3660 & 5460 crushers have a 25 gallon tank while 3242 and smaller crushers have a 20 gallon capacity.

Use an extreme pressure type oil with the proper viscosity grade. Typical brand names are: Amoco Amogear EP, Exxon Spartan EP, Gulf EP Lube HD, Mobil Mobilgear, Shell Omala, Texaco Meropa. Viscosity should be 220 with ambient temperatures above 32°F and 150 with temperatures below 32°F. (Mobil 630 and 629)

**Circulating Oil System
Flywheel Pump Drive****Figure 17***Circulating Oil System Components – Left Side View of Crusher with Flywheel-to-Pump Drive***Item Descriptions**

- A Oil reservoir
- C Oil pump
- D & E Suction filter with gauge
- F & G Discharge filter with gauge
- H Relief line
- J Pressure oiler
- K Flow indicator tube
- L Check valve
- M Oil manifold
- P Relief valve

Oil Pump

The oil pump (C) picks up oil from the tank and forces it through the distribution system to the top of each of the four main roller bearings. When the oil reaches the bottom of each bearing it flows by gravity back to the supply tank. Oil which reaches the central gravity of the pitman, after having passed through the pitman bearings, also flows back to the supply tank. In this way a continuous circulation of oil over all bearing rollers takes place whenever the crusher drive is operating.

System Filters

Two filters are used in the lubrication system, a suction-line filter (D) above the reservoir (A) and a discharge-line filter (F) below the oil manifold, (M).

The suction filter has a reusable 100-mesh wire cloth element to prevent particles from reaching the pump. The discharge filter has a 25-micron disposable element which prevents even the smallest particles from being carried to the bearings. Each filter has an internal bypass which assures oil flow even if the element is plugged.

A 75 psi external relief valve is included in the inlet to the discharge filter to prevent damage if oilers become plugged or are shut off.

If there is a drop in volume at pressure oilers, (J) this may be an indication filters are clogged.

The reusable filter should be cleaned seasonally and the disposable filter changed when oil is changed. Under excessive dust conditions, filters should be checked periodically.

Check Valve

A check valve (L) in the oil feed line to the flow indicators prevents any reverse flow of oil in the feed line. This assures instant discharge of fresh oil into each bearing as soon as crusher operation begins again.

Flow Adjustment

The control knobs (J) regulate the oil flow to the bearings. To adjust them, allow the crusher to run until the oil is warmed up. Fully open all knobs. The brass indicators will be at their highest points in the tubes (K). Then close the valves until all the indicators are at the same level.

Periodically check the level. If the level falls evenly or in one or two of the tubes, it could be a sign of bearing problems or clogged filters.

During normal operation the relief line (I) returns excess oil to the reservoir.

Filters and Pressure Gauges

The discharge filter gauge (G) shows the pressure in the feed line to the filter (F) and flow control unit (J). The gauge will indicate a pressure but the readings will vary with ambient temperature, type of lubricant, operating temperature, etc.

Suction gauge (E) will normally show little or no reading.

Dust Barrier Grease Requirement

Circumferential grease passages around the outer side of each bearing cap and retaining ring serve as dust barriers and oil retainers when they are kept full of grease. Regular injection of grease at the six fittings (A) Figure 16 will force trapped dirt and dust particles outward and keep the lubricating oil from leaking to the outside. Any grease which is forced inward and manages to reach the oil cavity on the inner side of the assembly merely displaces some oil and eventually adds to the overall lubrication of the bearings.

Grease these fittings as often as necessary to keep a slick of grease extruding from each barrier so that all dust and dirt are kept out and oil leakage is minimized. Use a lithium base, grade 2 grease.

Heating Oil Prior to Start-up

During periods of cold weather the system should be observed closely for pump V-belt slippage or pump cavitation (failure to pump oil even though pump is being driven). If no oil flow is visible through flow indicators (K) when the crusher flywheels are turning, there will eventually be a lack of the required lubrication at each

Cedarapids

A Raytheon Company

Circulating Oil System Flywheel Pump Drive

bearing. A pre-heating of the oil in the supply tank will help to minimize the problem.



Caution! Do not heat oil by applying a torch flame directly to the sides or bottom of the supply tank. Extreme heating will carbonize the oil and create serious operating problems.

Draining and Flushing System

Each 1000 hours of crusher operation or seasonally, whichever occurs first, drain the supply tank. Remove the screen from suction filter (D) and clean it. Reinstall the filter screen. Add at least 10 gallons of flushing oil to the supply tank. Run the crusher empty for at least 10 minutes, then stop the drive and drain the flushing oil. If it appears extremely dirty, repeat the flushing with fresh oil to remove more of the contaminants.

When the flushing has been completed, install a new element in the pump discharge line filter (F). Remove and clean the filter screen in suction filter (D). Reinstall the screen. Refill the supply tank to normal operating level with the lubricant recommended.

Oil Pump Drive (Flywheel Drive)

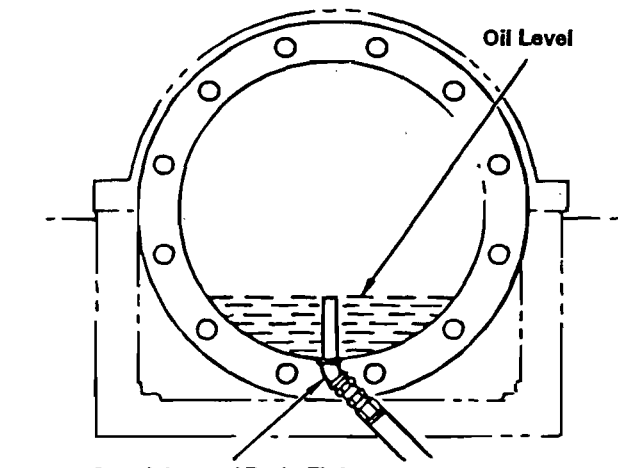
Some early lubrication system pumps were driven by belt from the flywheel. These had a link-type belt which could be replaced without removing the flywheel. A turnbuckle maintains belt tension by pivoting the pump bracket.

The belt should be kept only tight enough to drive the pump without slippage when the oil is cold at start-up. Over-tightening can cause rapid belt wear.

Oil Pump Drive Belt (Electric Motor Drive)

Maintain normal V-belt tightness by adjusting motor position. V-belt should be kept only tight enough to drive the pump without slippage when oil is cold at crusher start-up. Over-tightening will cause rapid V-belt wear.

Circulating Oil System Standpipe & Oil Level (Early Models Only)



Standpipe and Drain Fitting
(Used on serial numbers preceeding 38760)
End View of Side Bearing Showing Standpipe & Oil Level

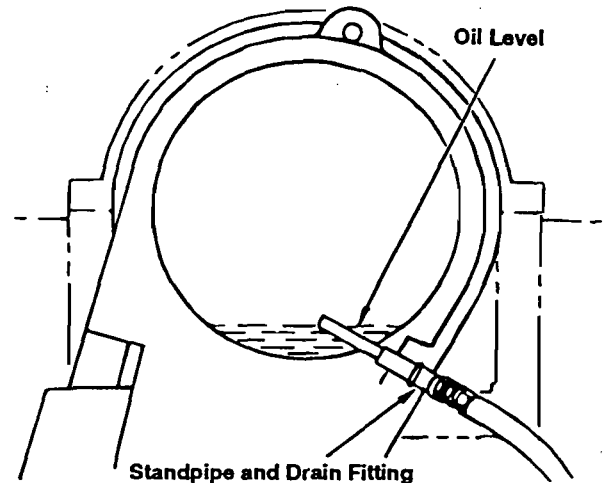


Figure 18

Standpipe and Drain Fitting
(Used on serial numbers preceeding 38760)
End View of Pitman Showing Standpipe & Oil Level



Caution! *Pitman Shaft Removal: The oil standpipes in the pitman must be unscrewed and removed before the shaft assembly with bearings can be withdrawn from the pitman. If this is not done, the standpipes will be severely damaged as shaft and bearings are withdrawn.*

Oil Level Standpipes

All crushers (except model 5460) that precede serial number 38760 have two oil level standpipes in the pitman. (Figure 18) Model 3648 and smaller crusher also have an oil level standpipe in each of the side bearing end caps. These standpipes keep a small amount of oil covering the bottom of each bearing at all times. The maintenance of this oil supply assures the proper lubrication of each bearing at the moment of start-up. Also, if the oil pump fails the bearings will still be adequately lubricated for a reasonable length of time.



Caution! *Routinely check the pressure system during each day's operation so that any interruption in the oil flow can be spotted quickly and restored. Shut down the crusher immediately if the oil flow is interrupted. The residual oil supply is not sufficient to last for long periods.*

Pitman Shaft Removal - The oil standpipes in the pitman must be unscrewed and removed before the shaft assembly with bearings can be withdrawn from the pitman.

Lubricating Stored Equipment

Idle equipment whether new or used, must be turned over at least every 30 days either by power or hand to redistribute the lubricant. Revolving the bearing assemblies periodically insures lubricant on all surfaces of the bearing.

Failure to rotate bearings when crusher is idle will permit lubricant to drain to the bottom of the bearing assembly and by the collection of moisture through condensation will set up a chemical reaction in the bearing assemblies know as corrosive staining. These stained areas are a positive point for premature bearing failures, as flaking will start at these points when the equipment is put back into operation.

Circulating Oil System Low Oil Flow Alarm System

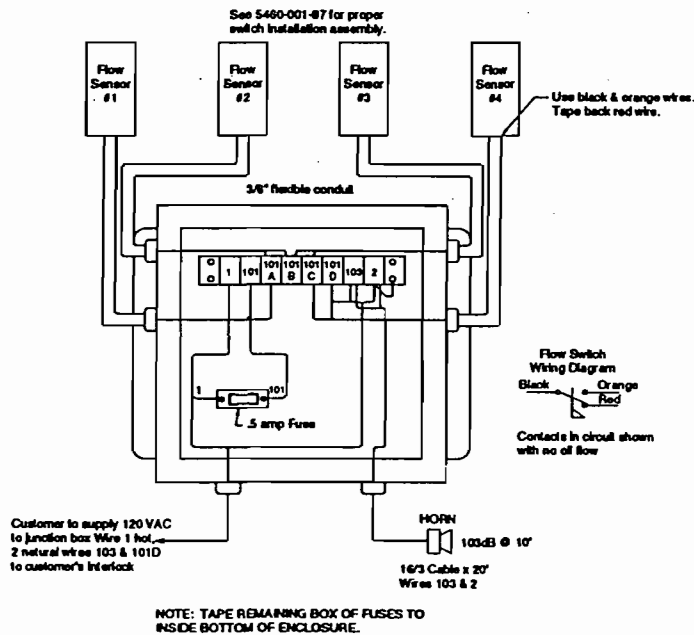


Figure 19
Wiring Diagram for Optional Low Flow Alarm System

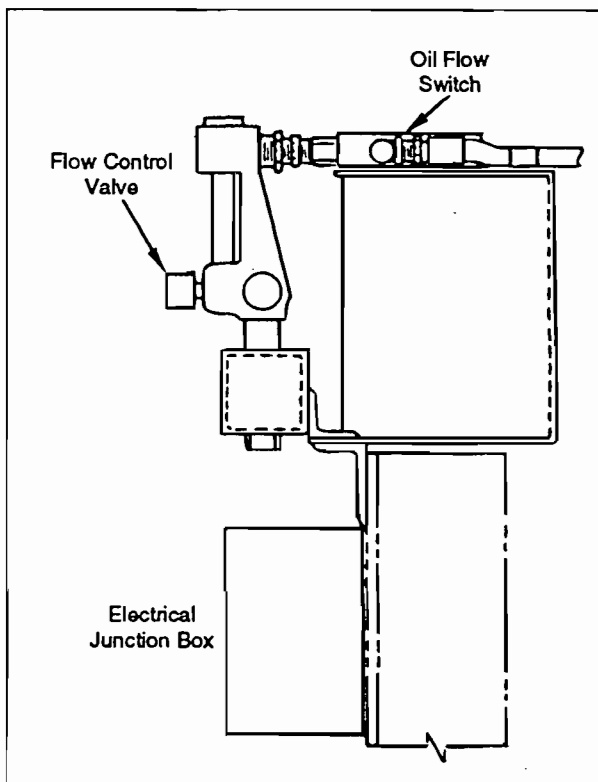


Figure 21
Location of Oil Flow Detection Switch

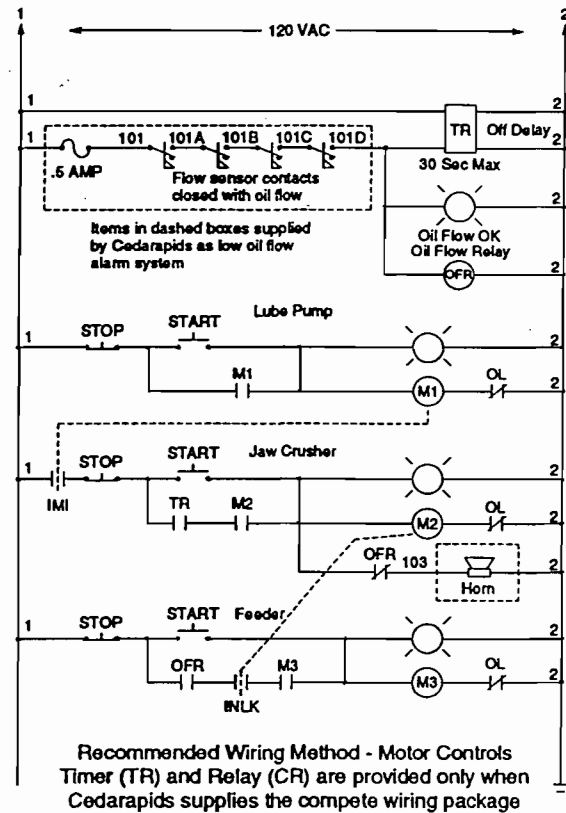


Figure 20
Schematic for Optional Low Flow Alarm System

Note: Flow sensors have normally closed contacts that open up as flow is sensed. The alarm will sound when there is a loss of oil flow.

Optional Low Oil Flow Alarm (Figures 19-21)

All jaw crushers equipped with circulating oil lubrication systems can be equipped with an electric alarm to warn of inadequate oil flow to one or more bearings. A flow sensor is installed between each flowmeter and the crusher bearing it serves. A set of electrical contacts is closed by oil flowing through the device.

When oil is flowing to all four crusher bearings, the "Oil Flow OK" light will be on, the OFR relay will be energized, allowing the feeder to run and the TR timer will close, allowing the crusher to run (Figure 20).

If any switch opens due to a no-flow condition, the oil flow relay will drop out, the feeder will stop, the horn will sound, and the "Oil Flow OK" light will go out, warning the operator of an oil flow problem. This condition will remain until the oil flow is reestablished.

If the alarm sounds for the time set on the timer, the crusher will stop.

Jaw Crusher Tool Listing

| Model | Sleeve Type | Removal Nut | Tightening Nut | Wrench |
|--------------------------|-------------|----------------------------|----------------------------|--------------|
| 1016 | Push | 369 | 7031 021 | 45500 752 03 |
| 1020X | Push | 569 | 569B | 45500 752 09 |
| 1020W | Pull | 569A | 569C | 45500 752 09 |
| 1024 | Push | 569 | 569B | 45500 752 09 |
| 1024W | Pull | 569A | 569C | 45500 752 09 |
| 1036B | Push | 697 | 697B | 45500 752 09 |
| 1036D | Pull | 697A | 896 | 45500 752 09 |
| 1036 | Pull | 697A | 896 | 45500 752 09 |
| 1236 | Pull | 697A | 896 | 45500 752 09 |
| 1236 | Pull | 4418 238 | 4418 237 | 45500 752 09 |
| 1242 | Pull | 896 | 897 | 45500 752 09 |
| 1248 | Pull | 896 | 897 | 45500 752 09 |
| 1424 | Pull | 895 | 896 | 45500 752 09 |
| 1524 | Pull | 697BA | 697 01 | 45500 752 09 |
| 1524 | Push | 697 | 697B | 45500 752 09 |
| 1536 | Push | 895 | 896 | 45500 751 09 |
| 1624 | Pull | 569D | 569E | 45500 751 09 |
| 1636 | Pull | 896 | 897 | 45500 751 09 |
| 1642 | Pull | 946 | 4418 115 | 45500 751 10 |
| 1648 | Pull | 947 | 946 | 45500 751 10 |
| 1824 | Push | 697 | 697B | 45500 751 09 |
| 1830 | Push | 895 | 896 | 45500 752 09 |
| 1836 | Push | 895 | 896 | 45500 752 09 |
| 2025 | Pull | 896 | 897 | 45500 752 09 |
| 2036 | Pull | 896 | 897 | 45500 752 09 |
| 2225 | Pull | 896 | 897 | 45500 752 09 |
| 2236 | Pull | 896 | 897 | 45500 752 09 |
| 2248 | Pull | 946 | 4418 115 | 45500 751 10 |
| 2436 | Pull | 946 | 4418 115 | 45500 751 10 |
| 2540 | Pull | 946 | 947 | 45500 751 10 |
| 2540 | Push | 947 | 946 | 45500 751 10 |
| 2542 | Pull | 947 | 946 | 45500 751 10 |
| 2640 | Pull | 946 | 4418 115 | 45500 751 10 |
| 2742 | Pull | 946 | 4418 115 | 45500 751 10 |
| 3040 | Push | 946A | 946 | 45500 751 10 |
| 3040 | Pull | 946 | 4418 115 | 45500 751 10 |
| 3042 | Push | 946A | 946 | 45500 751 10 |
| 3042 | Pull | 946 | 4418 115 | 45500 751 10 |
| 3054 | Pull | 946 | 4418 115 | 45500 751 10 |
| 3240 | Pull | 946A | 946 | 45500 751 10 |
| 3242 | Pull | 946 | 4418 115 | 45500 751 10 |
| 3648 | Pull | 4418 172 | 4418 170 | 45500 751 16 |
| 3660 | Push | 4418 190 | 4418 189 | 45500-751-20 |
| 4242 | Pull | 946 | 4418 115 | 45500 752 10 |
| 4248 | Push | 4418 189 | 4418 189 | 45500-751-20 |
| 5460 | Pull | 5460 002 34 5460 002 35 | 5460 002 34 5460 002 35 | 01376AXA |
| Twin Jaw Crushers | | | | |
| 1216 | Pull | 370 | 569B | 45500 751 09 |
| 1236 | Pull | 397A | 896 | 45500 751 09 |
| 1624 | Pull | 569D | 569E | 45500 751 09 |
| 1836 | Pull | 896 | 897 | 45500 751 09 |
| Dual Jaw Crushers | | | | |
| 1840/640 | Pull | 896 | 897A | 45500 751 09 |
| Gyra Jaw Crushers | | | | |
| 1072 | Pull | 947 | 946N | 45500 751 10 |

Crusher Operation Problems**Feed too large**

Pounding or crushing on pitman barrel and pitman bearing housings can cause short bearing life.

Feed too small

Excessive wear on bottom end of jaw plates. No wear in center area of jaw plates. Good manganese wasted.

Feeding material in excess of 35,000 - 40,000 PSI

Rock too hard can cause shaft breakage, bearing failure, base breakage and bolt fractures.

Setting crusher below minimum setting

Excessive wear on top of pitman, excessive wear on bottom of jaw plates. Overstressing shaft and bearing assemblies causing either or both shaft and bearing failure.

Choke feeding crusher

Excessive load on shaft and bearings. Excessive wear on pitman barrel. Excessive wear on feed hopper. Normal feed rate is to maintain 80% of jaw chamber.

Operating crusher too slowly

Make crusher too aggressive and end up overloading shaft, bearing and base, causing early failure.

Operating crusher too fast

No allowing enough time for jaw plates to grip the rock to break it. Excessive scrubbing wear action on jaw plates, shortening their life.

Operating at minimum setting short toggle plate & worn jaw plate

Excessively overloading stressing shaft.

Not centering movable jaw plate on pitman & in between key plate

Restricts the lateral movement of pitman. Stress loading bearings assembly causing excessive heat and early bearing failure. Possible shaft failure.

Operating with movable jaw plate rubbing on key plat due to movable jaw plate growth

Restricts lateral movement of pitman. Stress loading bearing assembly, causing excessive heat and early bearing failure. Possible shaft failure.

Crusher Operation Problems**Operating with worn jaw plates**

Pounding of jaw plates into base and pitman causing excessive wear on base and pitman. Depending on amount of wear, could over-stress shaft and bearings, causing either or both shaft and bearing failure.

Operating with two flat face jaw plates - no configuration

Excessive stress on shaft in hard rock application. For use in soft rock only.

Operating with two straight face jaw plates with configuration

Rapid wear on lower end of jaw plates.

Operating with unequal amount of shims behind the adjustable toggle seat

Over-stress of the toggle plate causes early failure of seat. Over-stress of one side of pitman and tension rod causing failure of tension rod and/or tension springs. Also causes uneven wear in toggle seats plus the toggle plate.

Toggle seat wedges loose

Will cause excessive wear on wedges, seat and base. Could cause toggle plate failure.

Operating with worn toggle seats

Will cause toggle plate to have uneven wear and early failure as well as toggle seat and crusher base damage.

Over-tensioning one rod and spring assembly

Will carry majority of load and fail prematurely.

Flywheel loose on shaft

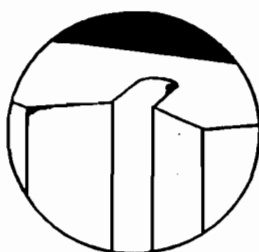
Damage keyways and shaft. Most important, loose lateral tightness for rotating seal which could cause contaminants to enter the bearing.

Cedarapids

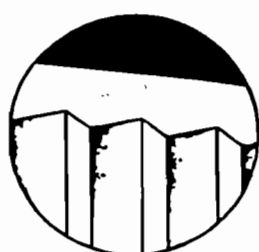
A Raytheon Company

**Crusher Jaws - Welded Base
Standard & Special**

TYPE 'FA'
ROUND TOOTH
DEEP CORRUGATION



TYPE 'EP'
POINTED TOOTH



TYPE 'E'
POINTED TOOTH



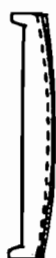
TYPE 'F'
ROUND TOOTH



STRAIGHT
FACE



REGULAR
CURVE



BELLIED



FULL
BELLIED

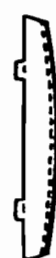
STATIONARY JAW



STRAIGHT
FACE



REGULAR
CURVE



BELLIED



FULL
BELLIED

MOVABLE JAW

SINGLE OVERHEAD ROLLER BEARING CRUSHER

| WELDED BASE | STATIONARY | | | | MOVABLE | | | |
|-----------------|----------------|----------------|-----------------|--------------|---|----------------|-----------------|--------------------------------------|
| Model Number | Part Number | Style Tooth | Pitch (Inch) | Profile | Part Number | Style Tooth | Pitch (Inch) | Profile |
| 1016 | 302 | E | 1-1/2 | Straight | 303B 305T | E | 1-1/2 | Reg Curve Full Bellied |
| 1020 | 402A | E | 1-1/2 | Bellied | 403 405 | E | 1-1/2 | Reg Curve Full Bellied |
| 1024 | 502 | E | 1-1/2 | Bellied | 503 505 | E | 1-1/2 | Reg Curve Full Bellied |
| 1036 | 602L | F | 2 | Bellied | 603SS 605S | F F | 2 | Reg Curve Full Bellied |
| | 602LH | F | 2 | Bellied | 603SS 605S | F F | 2 | Reg Curve Full Bellied |
| | 602UA | EP | 3 | Wedge | 603UA 603VA | EP EP | 3 | Straight Full Bellied |
| | 1036-049-01 | FA | 3-3/8 | Bellied | 1036-049-02 1036-049-03 1036-049-04 | FA | 3-3/8 | Bellied Full Bellied Reg Curve |
| | 1036-049-05 | FA | 3-3/8 | Reg Curve | 1036-049-02 1036-049-03 1036-049-04 | FA | 3-3/8 | Bellied Full Bellied Reg Curve |
| | 1036-049-06 | FA | 3-3/8 | Full Bellied | 1036-049-02 1036-049-03 1036-049-04 | FA | 3-3/8 | Bellied Full Bellied Reg Curve |

Cedarapids

A Raytheon Company

**Crusher Jaws - Welded Base
Standard & Special**

| SINGLE OVERHEAD ROLLER BEARING CRUSHER | | | | | | | | |
|---|--------------------|--------------------|---------------------|----------------|---|--------------------|---------------------|--------------------------------------|
| WELDED BASE | STATIONARY | | | | MOVABLE | | | |
| Model Number | Part Number | Style Tooth | Pitch (Inch) | Profile | Part Number | Style Tooth | Pitch (Inch) | Profile |
| 1236 | 1236X01 | F | 2 | Bellied | 1236X02 | F | 2 | Reg Curve |
| | 1236X03 | EP | 3 | Bellied | 1236X04 1236X06 | EP | 3 | Reg Curve Bellied |
| | 1236X05 | EP | 3 | Wedge | 1236X04 1236X06 | EP | 3 | Reg Curve Full Bellied |
| | 1236-066-01 | FA | 3-3/8 | Bellied | 1236-066-02 1236-066-04 1236-066-05 | FA | 3-3/8 | Full Bellied Reg Curve Bellied |
| | 1236-066-03 | FA | 3-3/8 | Reg Curve | 1236-066-02 1236-066-04 1236-066-05 | FA | 3-3/8 | Full Bellied Reg Curve Bellied |
| | 1236-066-06 | FA | 3-3/8 | Full Bellied | 1236-066-02 1236-066-04 1236-066-05 | FA | 3-3/8 | Full Bellied Reg Curve Bellied |
| 1524 | 702L | F | 2 | Straight | 703L 705A01 | F E | 2 | Reg Curve Full Bellied |
| | 9001-344 | EP | 3 | Bellied | 9001-345 | EP | 3 | Reg Curve |
| 1830 | 1830B01 | F | 2 | Straight | 1830B02 | F | 2 | Reg Curve |
| 1836 | 1636-050-20 | EP | 3 | Bellied | 1636-050-21 1636-050-22 | EP | 3 | Straight Bellied |
| | 1636-050-23 | FA | 3-3/8 | Bellied | 1636-050-24 1636-050-28 1636-050-29 | FA | 3-3/8 | Full Bellied Bellied Reg Curve |
| | 1636-050-27 | FA | 3-3/8 | Reg Curve | 1636-050-24 1636-050-28 1636-050-29 | FA | 3-3/8 | Full Bellied Bellied Reg Curve |
| 2025 | 2025A04 | E | 2 | Bellied | 2025A05 | E | 2 | Bellied |
| 2036 | 802D | E | 2 | Straight | 803D 805B | E | 2 | Straight Bellied |
| | 802-01 | EP | 3 | Bellied | 803DA 805C | EP | 3 | Straight Bellied |
| | 802DB | EP | 3 | Wedge | 803DA 805C | EP | 3 | Straight Bellied |
| | 2236-006-10 | FA | 4-3/8 | Reg Curve | 2236-006-11 2236-006-13 | FA | 4-3/8 | Reg Curve Bellied |
| | 2236-006-12 | FA | 4-3/8 | Bellied | 2236-006-11 2236-006-13 | FA | 4-3/8 | Reg Curve Bellied |
| 2225 | 2025A04 | E | 2 | Bellied | 2025A05 | E | 2 | Bellied |

Cedarapids

A Raytheon Company

**Crusher Jaws - Welded Base
Standard & Special**

| SINGLE OVERHEAD ROLLER BEARING CRUSHER | | | | | | | | |
|---|----------------------------|------------------------|-------------------------|---------------------------|----------------------------|------------------------|-------------------------|----------------------|
| WELDED BASE | STATIONARY | | | | MOVABLE | | | |
| Model Number | Part Number | Style Tooth | Pitch (Inch) | Profile | Part Number | Style Tooth | Pitch (Inch) | Profile |
| 2226 | 802D | E | 2 | Straight | 803D 805B | E | 2 | Straight Bellied |
| | 802-01 | EP | 3 | Bellied | 803DA 805C | EP | 3 | Straight Bellied |
| | 802DB | EP | 3 | Wedge | 803DA 805C | EP | 3 | Straight Bellied |
| | 2236-006-10 | FA | 4-3/8 | Reg Curve | 2236-006-11 2236-006-13 | FA | 4-3/8 | Reg Curve Bellied |
| | 2236-006-12 | FA | 4-3/8 | Bellied | 2236-006-11 2236-006-13 | FA | 4-3/8 | Reg Curve Bellied |
| 2248 | 2248-10-01 | EP | 3 | Bellied | 2248-100-02 2248-100-08 | EP | 3 | Straight Bellied |
| | 2248-10-09 | FA | 4-3/8 | Straight | 2248-100-10 2248-100-12 | FA | 4-3/8 | Reg Curve Bellied |
| | 2248-10-11 | FA | 4-3/8 | Bellied | 2248-100-10 2248-100-12 | FA | 4-3/8 | Reg Curve Bellied |
| 2436 | 2436-400-01 2436-400-05 | EP | 3 | Reg Curve Full Bellied | 2436-401-01 | EP | 3 | Bellied |
| 2540 | 901K | E | 3 | Straight | 902K | E | 3 | Straight |
| | 901KA | EP | 3 | Straight | 902KA 902L | DS EP | 3 | Straight Bellied |
| | 901KC | EP | 3 | Bellied | 902KA 902L | DS EP | 3 | Straight Bellied |
| | 901L | EP | 3 | Wedge | 902KA 902L | DS EP | 3 | Straight Bellied |
| | 2540-400-03 | FA | 5-3/8 | Bellied | 2540-400-04 2540-400-06 | FA | 5-3/8 | Bellied Reg Curve |
| | 2540-400-05 | FA | 5-3/8 | Reg Curve | 2540-400-04 2540-400-06 | FA | 5-3/8 | Bellied Reg Curve |
| 2540 H.D. | 901HA | B | 3 | Bellied | 902H | B | 3 | Bellied |
| | 901KA | EP | 3 | Straight | 902KA | DS | | Straight |
| 3042 | 3042-051-01 | FA | 6-3/8 | Bellied | 3042-051-02 3042-051-03 | FA | 6-3/8 | Reg Curve Bellied |
| | 3042-051-04 | FA | 6-3/8 | Reg Curve | 3042-051-02 3042-051-03 | FA | 6-3/8 | Reg Curve Bellied |
| 3054 | 3054-500-17 | FA | 6-3/8 | Bellied | 3054-500-18 | FA | 6-3/8 | Bellied |

Cedarapids

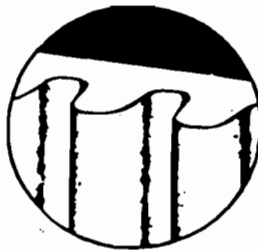
A Raytheon Company

**Crusher Jaws - Welded Base
Standard & Special**

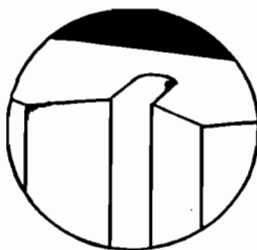
| SINGLE OVERHEAD ROLLER BEARING CRUSHER | | | | | | | | |
|---|--|--------------------|---------------------|---------------------------------|---------------------------------------|--------------------|---------------------|----------------------------------|
| WELDED BASE | STATIONARY | | | | MOVABLE | | | |
| Model Number | Part Number | Style Tooth | Pitch (Inch) | Profile | Part Number | Style Tooth | Pitch (Inch) | Profile |
| 3240 | 901KA | EP | 3 | Straight | 3040A05 3040-600-01 | DS EP | 3 | Straight Full Bellied |
| | 901KC | EP | 3 | Bellied | 3040A05 3040-600-01 | DS EP | 3 | Straight Full Bellied |
| | 901L | EP | 3 | Wedge | 3040A05 3040-600-01 | DS EP | 3 | Straight Full Bellied |
| | 2540-400-03 | FA | 5-3/8 | Bellied | 3040A05 3040-600-01 | DS FA | 5-3/8 | Straight Reg Curve |
| | 2540-400-05 | FA | 5-3/8 | Reg Curve | 3040A05 2640-001-27 2640-001-26 | DS FA FA | 5-3/8 | Straight Bellied Reg Curve |
| 3242 | 3242L01 | E | 7 | Straight | 3242L02 | DS | | Straight |
| | 3242L01F | EP | 7 | Straight | 3242L02 3242L02D | DS EP | 7 | Straight Full Bellied |
| | 3242-050-06 | FA | 6-3/8 | Bellied | 3242L02 3242-050-07 3242-050-05 | DS FA FA | 6-3/8 6-3/8 | Straight Bellied Reg Curve |
| | 3242-050-04 | FA | 6-3/8 | Bellied | 3242L02 3242-050-07 3242-050-05 | DS FA FA | 6-3/8 6-3/8 | Straight Bellied Reg Curve |
| 3648 | 3645-049-20 | FA | 6-3/8 | Reg Curve | 3645-049-21 3645-049-30 | FA | 6-3/8 | Reg Curve Bellied |
| | 3645-049-22 | FA | 6-3/8 | Bellied | 3645-049-21 3645-049-30 | FA | 6-3/8 | Reg Curve Bellied |
| 3660 | 3660-049-02 3660-049-03 | FA | 6 | Bellied Reg Curve | 3660-049-01 | FA | 6 | Bellied |
| 4242 | 3242L01 3242L01F | E EP | 7 | Straight | 3242L02 | DS | | Straight |
| | 3242-050-06 | FA | 6-3/8 | Bellied | 3242L02 3242-050-07 3242-050-05 | DS FA FA | 6-3/8 6-3/8 | Straight Bellied Reg Curve |
| | 3242-050-04 | FA | 6-3/8 | Reg Curve | 3242L02 3242-050-07 3242-050-05 | DS FA FA | 6-3/8 6-3/8 | Straight Bellied Reg Curve |
| 4248 | 4248B01D 4248-049-01 4248-049-03 | Swage FA FA | 6 6 6 | Bellied Reg Curve Bellied | 4248B02 4248B02 4248-049-02 | DS DS FA | 6 | Bellied Bellied Reg Curve |
| 5460 Requires 2-piece Jaw | 5460-001-85 5460-001-93 | FA | 6 | Straight Bellied | 5460-001-86 5460-001-92 | FA | 6 | Straight Bellied |
| 5748 | 4248B01D 4248-049-01 4248-049-03 | Swage FA FA | 6 6 6 | Bellied Reg Curve Bellied | 4248B02 4248B02 4248-049-02 | DS DS FA | 6 | Bellied Bellied Reg Curve |

Cedarapids

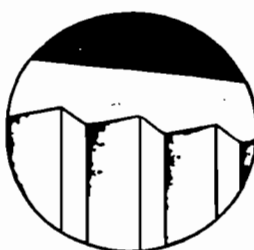
A Raytheon Company

**Crusher Jaws - Cast Base
Standard & Special**

TYPE 'FA'
ROUND TOOTH
DEEP CORRUGATION



TYPE 'EP'
POINTED TOOTH



TYPE 'E'
POINTED TOOTH



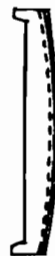
TYPE 'F'
ROUND TOOTH



STRAIGHT
FACE



REGULAR
CURVE



BELLIED



FULL
BELLIED

STATIONARY JAW



STRAIGHT
FACE



REGULAR
CURVE



BELLIED



FULL
BELLIED

MOVABLE JAW

SINGLE OVERHEAD ROLLER BEARING CRUSHER

| CAST BASE | STATIONARY | | | | MOVABLE | | | |
|--------------|-------------|-------------|--------------|--------------|---|-------------|----------------|--------------------------------------|
| Model Number | Part Number | Style Tooth | Pitch (Inch) | Profile | Part Number | Style Tooth | Pitch (Inch) | Profile |
| 336 | 6 | -Obsolete- | | | 7 | -Obsolete- | | |
| 336 Special | 102 | None | | Full Bellied | 103 | None | | Straight |
| 1016 | 302 | E | 1-1/2 | Straight | 303B 305T | E | 1-1/2 | Reg Curve Full Bellied |
| 1020 | 402A | E | 1-1/2 | Bellied | 403 405 | E | 1-1/2 1-1/2 | Reg Curve Full Bellied |
| 1024 | 502 | E | 1-1/2 | Bellied | 503 505 | E | 1-1/2 | Reg Curve Full Bellied |
| 1036 | 602L | F | 2 | Bellied | 603SS 605S | F F | 2 | Reg Curve Full Bellied |
| | 602LH | F | 2 | Bellied | 603SS 605S | F F | 2 | Reg Curve Full Bellied |
| | 602UA | EP | 3 | Wedge | 603UA 605VA | EP EP | 3 | Straight Full Bellied |
| | 1036-049-01 | FA | 3-3/8 | Bellied | 1036-049-02 1036-049-03 1036-049-04 | FA | 3-3/8 | Bellied Full Bellied Reg Curve |
| | 1036-049-05 | FA | 3-3/8 | Reg Curve | 1036-049-02 1036-049-03 1036-049-04 | FA | 3-3/8 | Bellied Full Bellied Reg Curve |
| | 1036-049-06 | FA | 3-3/8 | Full Bellied | 1036-049-02 1036-049-03 1036-049-04 | FA | 3-3/8 | Bellied Full Bellied Reg Curve |

Cedarapids

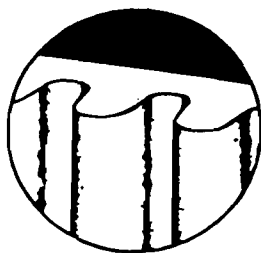
A Raytheon Company

**Crusher Jaws - Cast Base
Standard & Special**

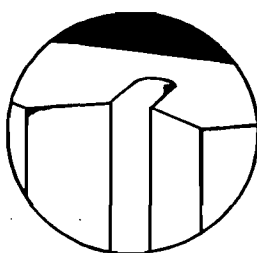
| SINGLE OVERHEAD ROLLER BEARING CRUSHER | | | | | | | | |
|---|--------------------|--------------------|---------------------|----------------|--------------------|--------------------|---------------------|---------------------------|
| CAST BASE | STATIONARY | | | | MOVABLE | | | |
| Model Number | Part Number | Style Tooth | Pitch (Inch) | Profile | Part Number | Style Tooth | Pitch (Inch) | Profile |
| 1524 | 702 | E | 2 | Straight | 703 705A | E | 2 | Reg Curve Obsolete |
| 1524 Special | 702L | F | 2 | Straight | 703L 705A01 | F E | 2 | Reg Curve Full Bellied |
| | 9001-344 | EP | 3 | Bellied | 9001-345 | EP | 3 | Reg Curve |
| 1536 | 802X | E | 2 | Straight | 803X 803Y | E | 2 | Reg Curve |
| 1536 Special | 802Y | F | 2 | Straight | 803XY | F | 2 | Reg Curve |
| 1836 | 802X | E | 2 | Straight | 803X | E | 2 | Reg Curve |
| 1836 Special | 802Y | F | 2 | Straight | 803XY 803Y | F | 2 | Reg Curve |

Cedarapids

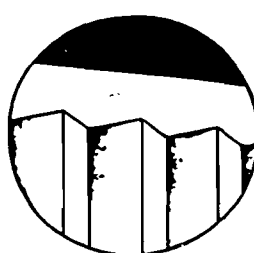
A Raytheon Company

**Crusher Jaws - Twin/Dual/Gyra
Standard & Special**

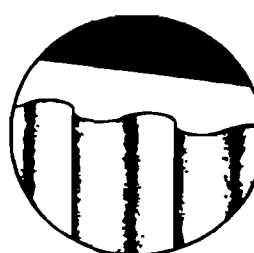
TYPE 'FA'
ROUND TOOTH
DEEP CORRUGATION



TYPE 'EP'
POINTED TOOTH



TYPE 'E'
POINTED TOOTH



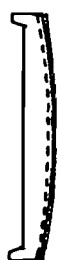
TYPE 'F'
ROUND TOOTH



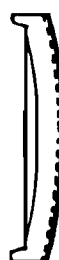
STRAIGHT
FACE



REGULAR
CURVE



BELLIED



FULL
BELLIED

STATIONARY JAW



STRAIGHT
FACE



REGULAR
CURVE



BELLIED



FULL
BELLIED

MOVABLE JAW

TWIN JAW ROLLER BEARING CRUSHER

| Model Number | STATIONARY | | | | MOVABLE | | | |
|--------------|-------------|-------------|--------------|---------|--|---------------------------|-----------------------------------|--|
| | Part Number | Style Tooth | Pitch (Inch) | Profile | Part Number | Style Tooth | Pitch (Inch) | Profile |
| 1216 | | | | | 303U | F | 2 | Bellied |
| 1236 | | | | | 1604A07 1640A07-02 | EP | 3 | Reg Curve Wedge |
| 1624 | | | | | 703T | F | | Bellied |
| 1836 | | | | | 1602A06 1602A06C 1602-001-05 1602-001-04 1602-001-03 | E EP FA FA FA | 3 3 3-3/8 3-3/8 3-3/8 | Reg Curve Reg Curve Full Bellied Bellied Reg Curve |

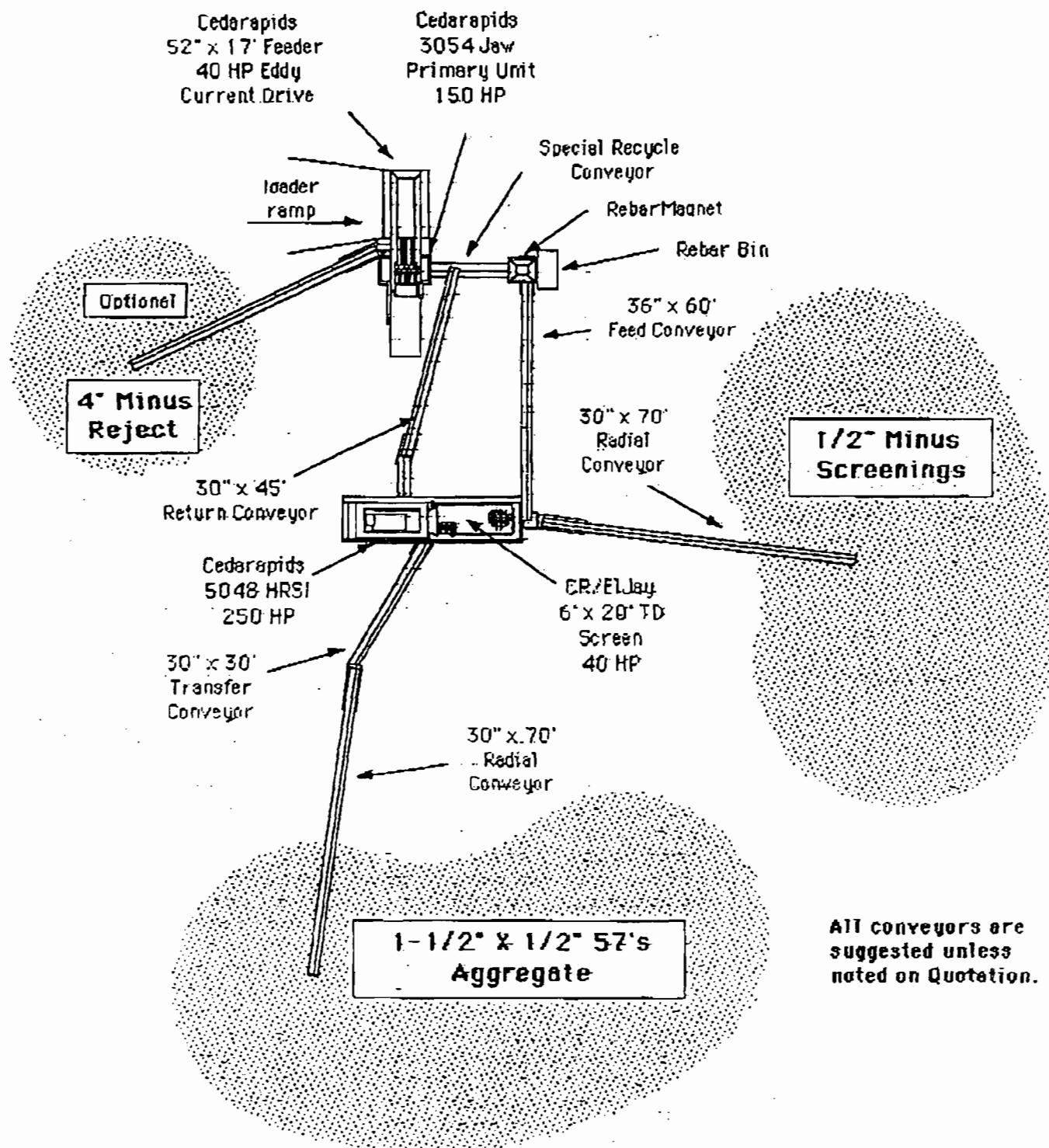
DUAL JAW ROLLER BEARING CRUSHER

| | | | | | | | | |
|-------------|----------|----|---|-----------|----------|----|---|---------|
| 1640 640 | 1700-12A | E | 3 | Reg Curve | 1700-13A | E | 3 | Bellied |
| 1830 630 | 1702A07A | EP | 3 | Reg Curve | 1702A08A | EP | 3 | Bellied |

GYRA DUAL JAW ROLLER BEARING CRUSHER

| | | | | | | | | |
|------|---------|----|---|-----------|----------------------------|----|---|-------------------------|
| 1036 | 1604A07 | EP | 3 | Reg Curve | 1606-002-01 1606-002-04 | EP | 3 | Bellied Full Bellied |
|------|---------|----|---|-----------|----------------------------|----|---|-------------------------|

TYPICAL CEDARAPIDS/ELJAY CONCRETE RECYCLING PLANT



All conveyors are suggested unless noted on Quotation.

Cedarapids

A Raytheon Company

**Jaw Crusher
Standard Jaw Configuration**

| STANDARD JAW CRUSHER CONFIGURATION | | | | | | | |
|---|----------------------|-------------------|------------|--------|----------------------|-------------------|------------|
| Model | Stationary Jaw Style | Movable Jaw Style | Tooth Type | Model | Stationary Jaw Style | Movable Jaw Style | Tooth Type |
| 1016 | Straight | Regular Curve | E | 2248 | Regular Curve | Bellied | FA |
| 1020 | Bellied | Regular Curve | E | 2436* | Regular Curve | Bellied | EP |
| 1024 | Bellied | Regular Curve | E | 2438† | Regular Curve | Bellied | FA |
| 1036 | Bellied | Regular Curve | FA | 2542 | Regular Curve | Bellied | FA |
| 1236 | Bellied | Regular Curve | FA | 2742 | Regular Curve | Bellied | FA |
| 1242 | Bellied | Regular Curve | FA | 3042 | Regular Curve | Bellied | FA |
| 1248 | Bellied | Regular Curve | FA | 3054** | Bellied | Bellied | FA |
| 1524 | Straight | Regular Curve | F | 3242 | Bellied | Regular Curve | FA |
| 1636 | Bellied | Regular Curve | FA | 3648 | Bellied | Regular Curve | FA |
| 1642* | Bellied | Regular Curve | FA | 3660** | Bellied | Bellied | FA |
| 1648 | Bellied | Regular Curve | FA | 4242‡ | Bellied | Regular Curve | FA |
| 1824 | Straight | Regular Curve | F | 4248 | Bellied | Regular Curve | FA |
| 1836 | Regular Curve | Bellied | FA | 5460 | Straight | Straight | FA |
| 2236 | Regular Curve | Bellied | FA | 5748‡ | Bellied | Regular Curve | FA |

*Hard Rock **Recycle †Limestone ‡Rip-Rap

Cedarapids

A Raytheon Company

Jaw Crusher Jaw Plate Assembly Procedure

Base Stationary Jaw & Key Plates

- (1) Stationary jaw machined surface must be checked for flatness both crosswise and top to bottom. It must be within $\frac{1}{16}$ ".
- (2) Stationary jaw must be centered in base and must be held tight upwards against the bottom end of the base and while in this position.
- (3) Lower key plates are installed and then a $\frac{3}{4}$ " or 1" spacer bar is set on top of the lower key plate and the upper key plate is installed.
- (4) Using a minimum of a 16 lb sledge hammer, you drive on the upper key plate forcing the lower key plate down tight in place.
- (5) A properly fitting key plate will have a minimum of 70% contact between the base guide and the ear of the jaw plate. At the same time, the bolts that hold the key plates in the base should be between $\frac{1}{2}$ way and the upper $\frac{3}{4}$ of the slotted hole in the base. At no time should the bolts contact either end of the base hole.
- (6) After the lower key plates are in position, remove the spacer and drive the upper key plates into position following guidelines for contact and bolt locations as in step (5).

NOTE

It may require grinding of key plates to properly fit as described above.

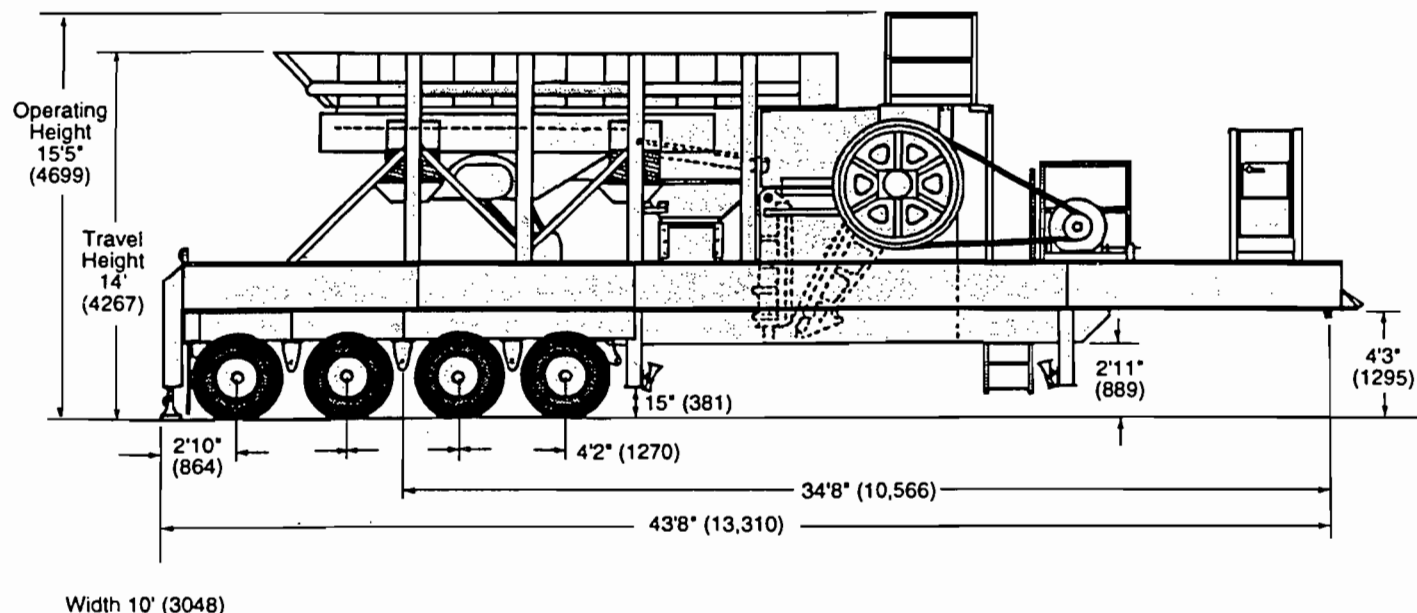
- (7) With steps (5) & (6) completed, install the required shims under the upper lip of the jaw plate and base and weld the shims to the base. Refer to print #3645-049-01.

Pitman Jaw Plate & Key Wedge

- (1) Movable jaw machined surface must be checked for flatness both crosswise and top to bottom. It must be within $\frac{1}{16}$ ".
- (2) The pitman lip must be smooth for the jaw plate to fit evenly and tight against the lip.
- (3) The movable jaw plate must be centered on the pitman.
- (4) The jaw wedge must be installed and be sure it does not extend beyond the end of the pitman, restricting the pitman slide float.
- (5) Install the keeper bolts, locknuts and washer to hold the wedge in place.
- (6) Using a minimum of a 16 lb sledge hammer, drive on the face of the wedge, starting in the center and working towards both ends to seat the wedge. While driving on wedge, a person is to be tightening the bolts and nuts in the same area.
- (7) At no time should the jaw wedge be driven in deeper than the pitman barrel surface. If it goes in too deep, remove it and add a shim on top of the wedge the same width and length of wedge and then reset it.

NOTE

The wedge should never bottom out so there is no room left to draw it tighter.



Specifications

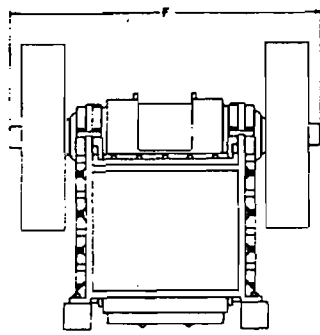
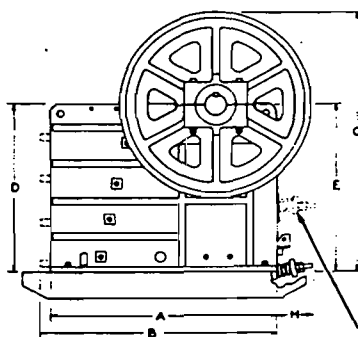
Jaw Crusher 30" x 54" (762 x 1372 mm)
 operating speed 225-275 rpm
 Feeder 52" x 17' (1321 x 5182 mm)
 operating speed 600-900 rpm
 Grizzly 60" (1524 mm) long; 3" (76 mm) avg. opening
 Pan liners 1/2" (12.7 mm)
 Hopper capacity 9 cu. yd.
 Tires (16) 11:00 x 22.5 tubeless
 Horsepower
 Jaw 150 hp, 1200 rpm, electric, tefc
 Feeder 40 hp, variable speed eddy current, 300-1650 rpm

Optional jaw power 200 hp, 1200 rpm, tefc, electric
 207 hp, 1800 rpm, 8.3L diesel
 Weight of plant (no options)
 Total 102,610 lbs (46,544 kg)
 King Pin 39,170 lbs (17,768 kg)
 Rear 63,440 lbs (28,776 kg)
 Weight of plant (with all options)
 Total 111,860 lbs (50,740 kg)
 King Pin 44,850 lbs (20,344 kg)
 Rear 67,010 lbs (30,396 kg)

Design and specifications subject to change without notice.
 Design features may be covered by patents issued and/or patents applied for

Cedarapids

A Raytheon Company



Tension spring location on 1016, 1020

Recommended Openings at Closed Stroke - Inches & (mm)

| Size | Min. | Max. | Size | Min. | Max. |
|------|---------|---------|------|----------|----------|
| 1016 | ¾ (19) | 3½ (89) | 2248 | 2½ (64) | 6 (152) |
| 1020 | ¾ (19) | 3½ (89) | 2436 | 2½ (64) | 6 (152) |
| 1024 | ¾ (19) | 3½ (89) | 2438 | 4½ (114) | 8 (203) |
| 1036 | 1½ (38) | 3½ (89) | 2542 | 3½ (89) | 10 (254) |
| 1236 | 1½ (38) | 5 (127) | 2742 | 3½ (89) | 10 (254) |
| 1242 | 1½ (38) | 5 (127) | 3042 | 4 (102) | 13 (330) |
| 1248 | 1½ (38) | 5 (127) | 3054 | 3½ (89) | 13 (330) |
| 1524 | 1½ (38) | 5 (127) | 3242 | 4 (102) | 13 (330) |
| 1636 | 1½ (38) | 5 (127) | 3648 | 4 (102) | 13 (330) |
| 1642 | 1½ (38) | 5 (127) | 3660 | 4 (102) | 13 (330) |
| 1648 | 1½ (38) | 5 (127) | 4242 | 14 (356) | 23 (584) |
| 1824 | 1½ (38) | 5 (127) | 4248 | 4 (102) | 13 (330) |
| 1836 | 1½ (38) | 5 (127) | 5460 | 6 (152) | 20 (508) |
| 2236 | 2½ (64) | 6 (152) | 5748 | 19 (483) | 28 (711) |

Dimension to the nearest Inch and 5mm

| Model | 1016 | 1020 | 1024 | 1036 | 1236 | 1242 | 1248 | 1524 | 1636 | 1642 | 1648 | 1824 | 1836 | 2236 |
|-------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| A | 40 1015 | 48 1220 | 45 1145 | 48 1220 | 48 1220 | 56 1420 | 59 1500 | 55 1395 | 61 1550 | 71 1800 | 66 1675 | 56 1420 | 64 1625 | 65 1650 |
| B | - | - | - | - | - | - | - | - | - | 73 1855 | - | - | - | - |
| C | 41 1040 | 46 1170 | 46 1170 | 46 1170 | 51 1295 | 55 1395 | 56 1420 | 57 1445 | 63 1600 | 76 1930 | 70 1780 | 57 1445 | 63 1600 | 77 1955 |
| D | 24 610 | 28 710 | 28 710 | 28 710 | 32 810 | 33 840 | 35 890 | 36 915 | 41 1040 | 46 1170 | 41 1040 | 36 915 | 41 1040 | 48 1220 |
| E | 26 660 | 28 710 | 28 710 | 28 710 | 33 840 | 34 865 | 35 890 | 39 990 | 42 1065 | 48 1220 | 42 1065 | 39 990 | 42 1065 | 49 1245 |
| F | 58 1470 | 72 1830 | 72 1830 | 81 2055 | 81 2055 | 98 2490 | 104 2640 | 67 1700 | 92 2335 | 99 2515 | 94 2385 | 77 1955 | 92 2335 | 92 2335 |
| G | 22 560 | 26 660 | 27 685 | 41 1040 | 41 1040 | 47 1195 | 53 1345 | 27 685 | 41 1040 | 47 1195 | 53 1345 | 27 685 | 41 1040 | 43 1090 |
| H | 14 355 | 14 355 | 21 535 | 18 455 | 19 480 | 20 510 | 19 480 | 18 455 | 16 405 | 20 510 | 16 405 | 19 480 | 16 405 | 17 430 |

| Model | 2248 | 2436 | 2438 | 2542 | 2742 | 3042 | 3054 | 3242 | 3648 | 3660 | 4242 | 4248 | 5748 | 5460 |
|-------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| A | 79 2005 | 88 2235 | 67 1700 | 82 2080 | 88 2235 | 88 2235 | 88 2235 | 93 2360 | 107 2715 | 118 2995 | 103 2615 | 123 3125 | 138 3505 | 149 3785 |
| B | 81 2055 | 91 2310 | - | 85 2160 | 88 2235 | 91 2311 | 91 2311 | 99 2515 | 113 2870 | - | 109 2770 | 126 3200 | 141 3580 | 152 3860 |
| C | 83 2110 | 89 2260 | 77 1955 | 93 2360 | 92 2337 | 92 2337 | 92 2337 | 105 2665 | 120 3050 | 125 3175 | 105 2665 | 137 3480 | 137 3480 | 172 4370 |
| D | 52 1320 | 61 1550 | 50 1270 | 63 1600 | 62 1575 | 62 1575 | 63 1600 | 75 1905 | 82 2080 | 86 2185 | 75 1905 | 96 2440 | 96 2440 | 127 3225 |
| E | 54 1370 | 61 1550 | 49 1245 | 65 1650 | 64 1626 | 64 1626 | 64 1626 | 77 1955 | 84 2135 | 88 2235 | 77 1955 | 101 2565 | 101 2565 | 130 3300 |
| F | 99 2515 | 94 2385 | 92 2335 | 95 2415 | 99 2515 | 99 2515 | 110 2795 | 99 2515 | 101 2565 | 119 3025 | 99 2515 | 120 3050 | 120 3050 | 140 3555 |
| G | 53 1345 | 43 1090 | 43 1090 | 45 1145 | 47 1195 | 47 1195 | 69 1755 | 47 1195 | 52 1320 | 78 1980 | 47 1195 | 55 1395 | 55 1395 | 67 1700 |
| H | 16 405 | 17 430 | 18 455 | 19 480 | 17 430 | 17 430 | 20 510 | 22 560 | 20 510 | 28 711 | 22 560 | 20 510 | 20 510 | 18 455 |

Standard Features

Fabricated, stress-relieved welded steel base
 Rib-reinforced side plates
 Close-tolerance machining of jaw plate backs and seating surfaces
 Reversible key plates through model 2438
 Drop-forged, heat-treated, chrome-nickel-steel overhead eccentric shaft
 Spherical self-aligning roller bearings

Hydraulic bearing removal for 3648 side bearing, models 4248 and 5460 side and pitman bearings
 Cast steel pitman
 Hydraulic/shim toggle seat adjustment (discharge opening) except wedge adjustment on 1016 and 1020
 One smooth and one grooved flywheel
 Split-hub flywheels
 Standard left-hand drive (face tension spring)

Options

V-belt drives
 Grooving second flywheel
 Circulating oil lubrication system with reservoir and low-oil alarm for 1836 and above
 Steel skid for crusher and motor for 2236 and above

Motor platform for 2236 and above
 Operator's platform, ladder, crusher hopper for 2236 and above
 Stationary grizzly with bypass chute for 2236 and above
 Undercrusher discharge chute to belt conveyor, end or side discharge, for 2236 and above

Dimensions to nearest inch and mm - weights (kg)

| Model | 1016 | 1020 | 1024 | 1036 | 1236 | 1242 | 1248 | 1524 | 1636 | 1642 | 1648 | 1824 | 1836 | 2236 |
|----------------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|-----------------------|------------------|------------------|-----------------------|-------------------|------------------|------------------|------------------|
| Weights | 5306 2406 | 7000 3175 | 8255 3744 | 12,551 5693 | 13,978 6340 | 19,936 9042 | 24,300 11022 | 12,305 5581 | 21,003 9527 | 33,998 15421 | 28,406 12885 | 12,426 5636 | 21,280 9653 | 24,903 11296 |
| HP | 20-30 | 25-40 | 40-50 | 55-70 | 60-75 | 70-100 | 80-120 | 40-60 | 60-90 | 100-130 | 100-150 | 40-60 | 60-90 | 90-125 |
| RPM | 300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 | 250-300 |
| Jaw Opening | 10x16 255x405 | 10x20 255x510 | 10x24 255x510 | 10x36 255x915 | 12x36 305x915 | 12x42 305x106 5 | 12x48 305x122 0 | 15x24 380x610 | 16x36 405x915 | 16x42 405x106 5 | 16x48 405x1220 | 18x24 455x610 | 18x36 455x915 | 22x36 560x915 |
| Shaft Dia. | 3.937 | 4.4375 | 4.4375 | 5.4375 | 5.9375 | 6.4375 | 6.4375 | 4.921 | 6.4375 | 8.6603 | 7.091 | 4.921 | 6.4375 | 6.4375 |
| Side Bearing | 85 | 113 | 113 | 138 | 151 | 164 | 164 | 125 | 164 | 220 | 180 | 125 | 164 | 164 |
| Shaft Dia. | 5.120 | 5.907 | 5.907 | 7.4821 | 7.8764 | 7.875 | 7.875 | 6.694 | 7.875 | 10.2383 | 8.664 | 6.694 | 7.875 | 7.875 |
| Pitman Bearing | 130 | 150 | 150 | 190 | 200 | 200 | 200 | 170 | 200 | 260 | 220 | 170 | 200 | 200 |
| Std. Grooved Flywheel Dia. | 30 760 | 36 915 | 36 915 | 36 915 | 36 915 | 42 1065 | 42 1065 | 36 915 | 42 1065 | 55 1395 | 42 1065 | 36 915 | 42 1065 | 50 1270 |
| Face Std. Flywheel | 7 175 | 11 280 | 11 280 | 11 280 | 11 280 | 12 305 | 12 305 | 11 280 | 12 305 | 13 330 | 12 305 | 11 280 | 12 305 | 13 330 |
| Stationary Jaw Length | 20 510 | 22 560 | 21 535 | 24 610 | 28 710 | 29 735 | 29 735 | 34 865 | 34 865 | 38 965 | 34 865 | 33 840 | 34 865 | 43 1090 |
| Movable Jaw Length | 26 660 | 27 685 | 27 685 | 27 685 | 31 785 | 33 840 | 34 865 | 40 1015 | 41 1040 | 45 1145 | 41 1040 | 40 1015 | 41 1040 | 50 1270 |

| Model | 2248 | 2436 | 2438 | 2542 | 2742 | 3042 | 3054 | 3242 | 3648 | 3660 | 4242 | 4248 | 5748 | 5460 |
|----------------------------|-----------------------|------------------|------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|
| Weights | 43,094 19547 | 46,737 21200 | 26,017 11801 | 42,095 19366 | 48,520 22008 | 48,520 22008 | 52,740 28269 | 57,137 25917 | 79,653 36131 | 107,664 48836 | 58,838 26689 | 104,567 47431 | 117,000 53071 | 196,258 89023 |
| HP | 127-175 | 125-150 | 90-125 | 125-175 | 125-175 | 125-175 | 125-175 | 150-200 | 200-250 | 250-300 | 150-200 | 250-300 | 250-300 | 350-450 |
| RPM | 225-275 | 225-275 | 250-300 | 225-275 | 225-275 | 225-275 | 225-275 | 225-275 | 200-250 | 210-235 | 225-275 | 200-225 | 200-225 | 200 |
| Jaw Opening | 22x48 560x122 0 | 24x36 610x915 | 24x38 610x965 | 25x42 625x106 5 | 27x42 685x106 5 | 30x42 760x106 5 | 30x54 760x137 2 | 32x42 810x106 5 | 36x48 915x122 0 | 36x60 915x152 4 | 42x42 1065x106 5 | 42x48 1065x122 0 | 57x48 1445x122 0 | 54x60 1372x152 4 |
| Shaft Dia. | 8.36603 | 8.6603 | 6.4375 | 7.091 | 8.6603 | 8.6603 | 8.6603 | 8.6603 | 10.375 | 14.000 | 8.6603 | 14.000 | 14.000 | 18.000 |
| Side Bearing | 220 | 220 | 164 | 180 | 220 | 220 | 220 | 220 | 264 | 356 | 220 | 356 | 356 | 457 |
| Shaft Dia. | 10.2383 | 10.2383 | 7.875 | 8.6645 | 10.2383 | 10.2383 | 10.2383 | 10.2383 | 11.815 | 15.570 | 10.2383 | 15.750 | 15.750 | 19.687 |
| Pitman Bearing | 260 | 260 | 200 | 220 | 260 | 260 | 260 | 260 | 300 | 400 | 260 | 400 | 400 | 500 |
| Std. Grooved Flywheel Dia. | 57 1445 | 57 1445 | 55 1395 | 57 1445 | 57 1445 | 57 1445 | 57 1445 | 57 1445 | 72 1830 | 72 1830 | 57 1445 | 72 1830 | 72 1830 | 84 2134 |
| Face Std. Flywheel | 18 455 | 15 380 | 13 330 | 15 380 | 15 380 | 18 455 | 18 455 | 18 455 | 13 330 | 13 330 | 18 455 | 13 330 | 13 330 | 20 510 |
| Stationary Jaw Length | 45 1145 | 53 1345 | 43 1090 | 57 1445 | 57 1445 | 57 1445 | 57 1445 | 68 1725 | 77 1956 | 77 1956 | 68 1725 | 90 2285 | 90 2285 | 113 2870 |
| Movable Jaw Length | 56 1420 | 65 1650 | 50 1270 | 63 1600 | 65 1650 | 65 1650 | 65 1650 | 75 1905 | 85 2160 | 85 2160 | 75 1905 | 98 2490 | 98 2490 | 129 3277 |

Design and specifications subject to change without notice.
 Design features may be covered by patents issued and/or patents applied for.

Michigan**CAT**

Engine Division

25000 Nov. Road
Novi, Michigan 48375
Phone: 800/833-1781

Connie Griffore
Generator Rental Manager
313/349-7050 Ext. 323 Light Plants/Used Gen Sets

GENERATOR SET**800**
60 Hz**PRIME POWER**
800 KW

... reduction tested and delivered to you in a package that is ready to be connected to your fuel and power lines. ... **ENGESIZE** (Computer sizing) available. ... Supported 100% by your Caterpillar® Dealer with Warranty — Parts and Labor. ... Extended Warranty available in some areas. ... Generator Set and Components meet or exceed the following specifications: AS1359, AS2789, ABGSM TM3, BS4999, DIN8271, DIN8280, EQSA101P, JEM1359, IEC 34/1, ISO 3046/1, ISO DIS8526, NEMA MG1-22.

RELIABLE, FUEL EFFICIENT DIESEL

The compact, four-stroke-cycle diesel engine combines durability with minimum weight while providing dependability and economy. The fuel system operates on a variety of fuels.

THE CATERPILLAR SR4 GENERATOR

Single-bearing, wye connected, static regulated brushless excited generator designed to match the performance and output characteristics of the Caterpillar Diesel Engine that drives it.

EXCLUSIVE CATERPILLAR VOLTAGE REGULATOR

Three phase sensing and Volts per Hertz regulation with Constant Voltage in the normal operating range gives precise control and excellent Block Loading.

STANDARD PACKAGE ARRANGEMENT**ENGINE**

Aftercooler
Air Cleaner with service indicator
Base, Structural Steel
Breather, Crankcase
Cooler, Lubricating Oil
Exhaust Fitting and Flange
Filters, right hand
Fuel, full flow
Lubricating Oil, full flow
Governor
Lifting Eyes
Manifold, Exhaust, Dry
Pumps,
Fuel Transfer, gear driven
Lubricating Oil, gear driven
Jacket Water, gear driven
Radiator
Shutoff, Manual
Starting, Electric, 24 volt DC
GENERATOR
SR4 Brushless with VR3
Automatic Voltage Regulator

CONTROL PANEL

Digital Ammeter, Voltmeter,
Phase Selector Switch,
Frequency Meter
Auto start-stop control module
w/Cycle Crank and Cooldown
Digital DC Voltmeter,
Tachometer, Hourmeter
Emergency Stop Push Button
Engine Control Switch for Auto,
Start/Run, Off/Reset, Stop
Digital Oil Pressure and Water
Temperature Gauges
Shutoffs with Indicators for:
Low Oil Pressure
High Water Temperature
Overspeed
Overcrank
Emergency Stop Push Button
Voltage Adjust Rheostat
System Diagnostic Codes
Digital Readout
Lamp Display

OPTIONAL EQUIPMENT**ENGINE**

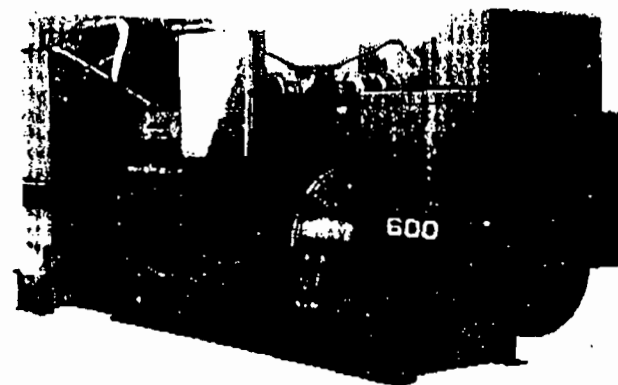
Air Cleaner, Heavy Duty
Charging Alternator
Exhaust Systems
Governor, Woodward
Protection Devices
Tachometer Drive
GENERATOR
Manual Voltage control
Space Heater
MIL Std. 481B
RFI N Level (VDE 875), BS800
SWITCHGEAR
Circuit Breaker
Manual
Electric Operated
Enclosure—Floor standing
NEMA 1
Main Load Bus

SWITCHGEAR

Paralleling
Manual
Permissive
Auto (Consult Factory)
Protective Relays

CONTROL PANEL

Enclosure, NEMA 12/IP 44
Provision for:
Alarm Module
Auxiliary Relay
Governor Speed Switch
Illuminating lights
Installed 1724 speed
sensing panel
Reverse Power Relay
Starting Aid Switch
Synchronizing Lights



Generator Set may be shown
with optional equipment.

GENERAL SPECIFICATIONS — 60 Hz**CAT 3412 ENGINE**
1800 RPM

Type—Watercooled Diesel
Aspiration—turbocharged-
aftercooled
Cycle—four stroke
No. of Cylinders—V-12

Bore—137 mm (5.4 in)
Stroke—152 mm (6.0 in)
Piston Displacement—
270 liter (1649 cu in)
Compression Ratio—14.5:1

CATERPILLAR SR4 GENERATOR

Frame Size—589
Type—Static Regulated Brushless Excited
Construction—Single Bearing, Close coupled
Three Phase—wye connected
Insulation—Class F with Tropicalization
Terminal Box—drip proof IP 22
Overspeed Capability—150%
Wave Form—Less than 5% Deviation
Paralleling Capability—Optional with adjustable Voltage Droop
Voltage Regulator—3 Phase Sensing with Volts-per-Hertz
Adjustable —25% +10%
Voltage Regulation—Less than plus or minus 1%
Voltage Gain—Adjustable to compensate for engine speed droop
and line loss
TIF—Less than 50
THF—Less than 3%

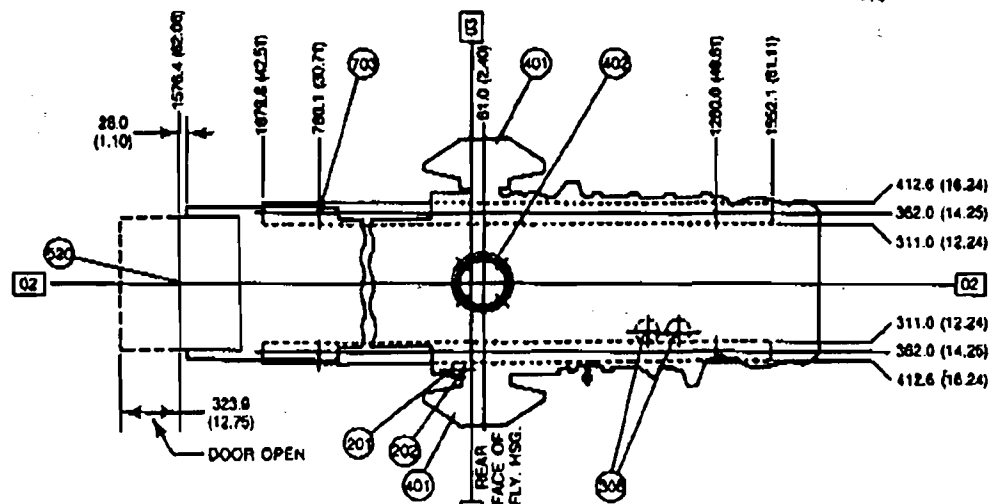
CATERPILLAR CONTROL PANEL

24 VOLT DC CONTROL
Terminal Box Mounted
Vibration Isolated
NEMA 1, IP 22 Enclosure
Dead Front
Lockable Door
Generator Instruments meet ANSI C-39.1

VOLTAGES AVAILABLE

139/240, 277/480, 346/600, 173/300, 360
(Adjustable a minimum of +10% -10%)
(Consult T.I.F. for possible deration)

- 201 - FUEL INLET
- 202 - EXCESS FUEL RETURN
- 302 - OIL FILTER
- 401 - AIR INLET
- 402 - EXHAUST
- 521 - CONTROL AND POWER PANEL
- 703 - CUSTOMER MOUNTING HOLES



TECHNICAL DATA

| Rating Information | Rating Type Power Rating @ 0.8 PF with Fan Power Rating @ 0.8 PF with Fan | METRIC | | ENGLISH | |
|-------------------------------------|---|---------------------|-------|----------|--------|
| | | PRIME | STBY | PRIME | STBY |
| | | kW | 545 | kW | 545 |
| | | kV•A | 681 | kV•A | 681 |
| Dimensions | Generator Frame Size | | | | |
| | Length | mm | 589 | in | 589 |
| | Width | mm | 3650 | in | 151.5 |
| | Height | mm | 1626 | in | 64.0 |
| | Weight (Dry) | kg | 2153 | lb | 84.8 |
| Lubrication & Cooling Systems | Engine Lubricating Oil Capacity | L | 4832 | qts | 10,750 |
| | Engine Coolant Capacity w/o Radiator | L | 71.9 | gal | 76 |
| | Engine Coolant Capacity with Radiator | L | 56.7 | gal | 15.0 |
| | Standard Radiator Arrangement Data: | | | | |
| | Air Flow (Max. @ Rated Speed) | m ³ /min | 158.9 | cfm | 44,500 |
| | Air Flow Restriction (After Radiator) | kPa | 1260 | in water | 0.5 |
| | Ambient Air Temperature (Consult T.I.F.) | Deg. C | 0.12 | Deg. F | 133 |
| | Coolant Pump External Resistance (Max. Allowable) | m water | 58 | ft water | 20.1 |
| | Coolant Pump Flow @ Max. Allowable Resistance | L/min | 6.1 | gpm | 20.1 |
| | | | 681.4 | | 180 |
| Exhaust System | System Backpressure (Max. Allowable) | kPa | 6.7 | in water | 27 |
| | Exhaust Flange Size (Internal Dia.) | mm | 203 | in | 8 |
| Performance Data @ Rated Conditions | Fuel Consumption (100% Load) with fan | L/Hr | 149.8 | gph | 39.6 |
| | Fuel Consumption (75% Load) with fan | L/Hr | 111.8 | gph | 29.4 |
| | Combustion Air Inlet Flow Rate | m ³ /min | 122.4 | cfm | 43.5 |
| | Exhaust Gas Flow Rate | m ³ /min | 51.0 | cfm | 32.3 |
| | Heat Rejection to Coolant (Total) | kW | 1800 | Btu/min | 1800 |
| | Heat Rejection to Exhaust (Total) | kW | 4800 | Btu/min | 5260 |
| | Heat Rejection to Atmosphere from Engine | kW | 352 | Btu/min | 20,018 |
| | Heat Rejection to Atmosphere from Generator | kW | 583 | Btu/min | 22,178 |
| | Exhaust Gas Stack Temperature | Deg. C | 66 | Btu/min | 33,212 |
| | | | 38.9 | Btu/min | 37,581 |
| | | | 43.8 | Btu/min | 4891 |
| | | | 500 | Btu/min | 5232 |
| | | | 620 | Btu/min | 2210 |
| Deration: | Altitude — 3.0% per 305 m (1000 ft) above | m | 2250 | ft | 7400 |
| | Temperature — 1.9% per 5.5 deg. C (10 deg. F) above | Deg. C | 55 | Deg. F | 131 |
| | at sea level or per degree above standard ambient at altitude above 760 m (2500 ft) | | | | |

CONDITIONS AND DEFINITIONS

- Prime** — For continuous electrical service with 10% overload capability for one hour in twelve in accordance with ISO 3046/1, DIN 6271, BS 5514, and ISO 8528.
- Standby** — For continuous electrical service during the interruption of normal power.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO 3046/1, DIN 6271 and BS 5514 standard conditions. Fuel rates are based on ISO 3046 and on fuel oil of 35 deg. API (16 deg. C or 60 deg. F) gravity having a LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29 deg. C (85 deg. F) and weighing 838.9 g/l (7.001 lb/U.S. gal.).

No generator set deration required below 55 deg. C (131 deg. F)

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.

Emissions Data **Caterpillar 3412 Generator Set** ~~545~~kw, 1800rpm 800

3412C DI TA JW DRY MANE TURBO QTY 2 HYDRA GOV
 TM4610-06 PGS PAIR 60 WERT1 EXH 6TK DIA 8.0 IN
 GEN 545.0 W/F EXW 546.0 W/O F EXW 780 W/F BHP 810 W/O F BHP @ 1800 RPM

EMISSIONS DATA * * REFERENCE NOTES - NOT TO EXCEED * * * * *
 EMISSIONS DATA MEASUREMENT IS CONSISTENT WITH THOSE DESCRIBED IN EPA CFR 40
 PART 86 SUBPART D AND ISO 8178-1 FOR MEASURING HC, CO, CO2 AND NOX. THESE
 PROCEDURES ARE VERY SIMILAR TO THE METHODS DESCRIBED IN EPA CFR 40 PART 60
 APPENDIX A METHOD 25A FOR HYDROCARBONS, METHOD 10 FOR CO, METHOD 7E FOR NOX.

DATA SHOWN IS BASED ON STEADY STATE ENGINE OPERATING CONDITIONS OF 77 DEG F,
 20.42 IN HG AND NUMBER 2 DIESEL FUEL WITH 35 DEG API AND LHV OF 18,390 BTU/LB.

EMISSIONS DATA * * * * * RATED SPEED * * * * * STANDARD TIMING

| "NOT TO EXCEED DATA" | | | | | O2 (DRY) | | | |
|----------------------|-------------------------|------------------------|-----------|----------------------|---------------------|----------------------|--------------------|-----------------------|
| GEN PWR KW | ENG PWR % LOAD | NOX (AS NO2) BHP | CO PPM | TOTAL HC LB/HK | PART MATTER % | IN EXH (VOL) % | SMOKE OPAC % | BOSCH SMOKE NO. |
| 545.0 | 100 | 810.0 | 13.64 | .47 | .13 | .825 | 10.01 | 4.8 1.85 |
| 408.8 | 75 | 616.0 | 11.04 | .29 | .17 | .413 | 10.48 | 3.4 1.35 |
| 272.5 | 50 | 424.0 | 8.43 | .16 | .20 | .318 | 11.28 | 2.5 1.28 |
| 136.3 | 25 | 235.0 | 5.67 | .11 | .18 | .254 | 13.48 | 1.7 1.28 |
| 54.5 | 10 | 114.0 | 3.47 | .21 | .44 | .219 | 15.87 | 1.4 1.29 |

EMISSIONS DATA * * * * * RATED CONDITIONS * * STANDARD TIMING

"NOMINAL DATA"

AT RATED:

| | |
|---|--------------|
| WET EXHAUST MASS | 7943 LB/HK |
| WET EXHAUST FLOW (891 DEG F STACK TEMP) | 4591 CFM |
| WET EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)... | 1670 STD CFM |
| DRY EXHAUST FLOW RATE (32 DEG F AND 29.98 IN HG)... | 1507 STD CFM |
| FUEL FLOW RATE | 39.9 GAL/HK |

VI. CONTROL EQUIPMENT

CONTROL EQUIPMENT

All of the equipment used to control fugitive dust emissions from this crushing unit was generated by crushing and maintenance personnel on as needed basis as this crushing unit did not come equipped with any dust suppression equipment when purchased.

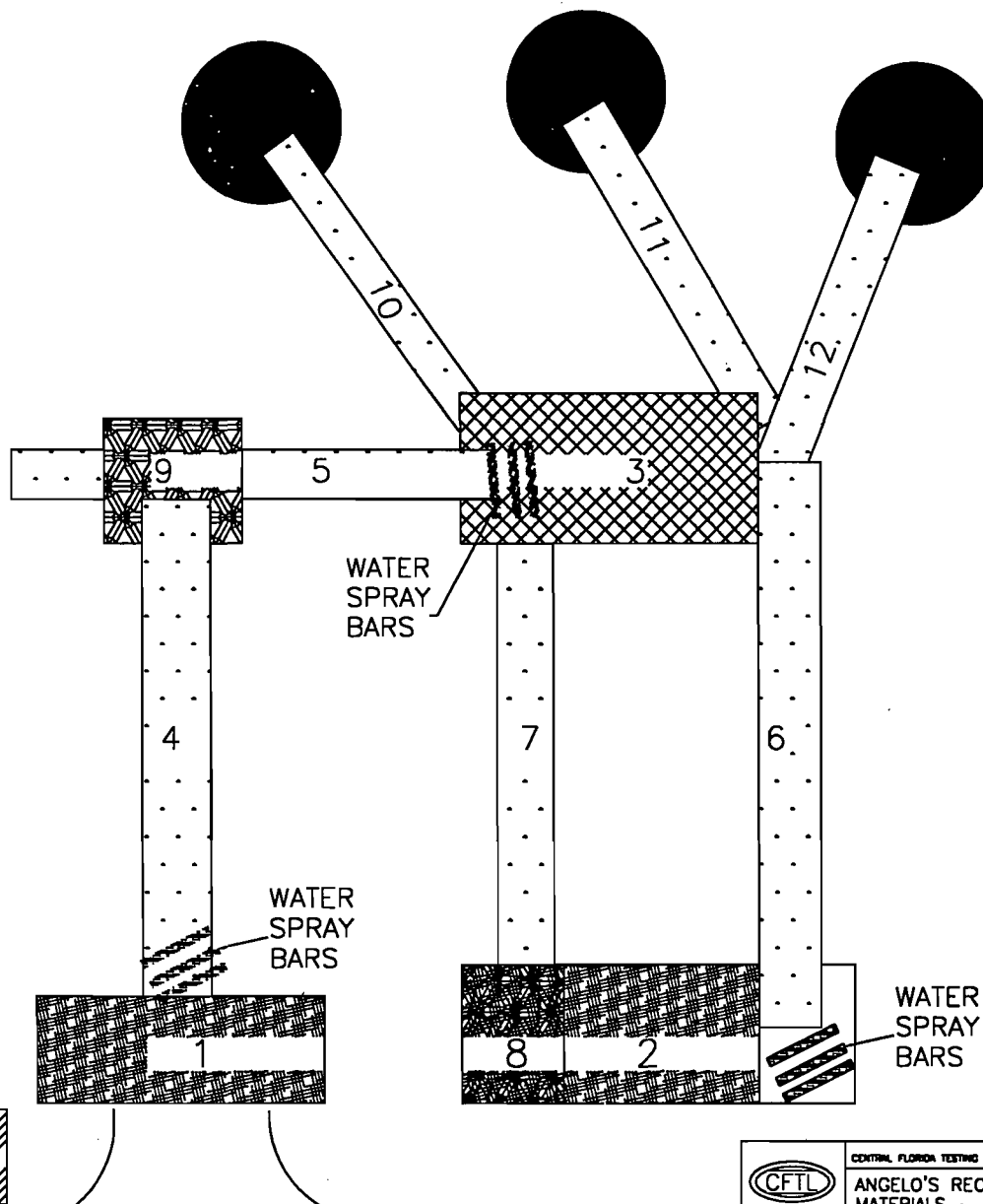
The water spray bar and spray head system used on this equipment were manufactured and installed on all areas where possible fugitive dust emissions would occur during the crushing, screening and conveying operations. These areas include the grizzly feeder, the crusher, the conveyor belt drop points, screens and discharge pan.

The control process starts with an on site well that is equipped with two (2) electric pumps (only one used at a time as one is a spare) that is used to feed water through 1 1/2 inch PVC pipe to a hose bib rack. From the hose bib rack water is fed through either 1/2 PVC piping or 1/2 inch hose to spray heads and bars mounted at the various fugitive emission points mentioned above at 25-40 psi, depending what is needed to control the emissions. When at other sites the crusher is equipped with its own pump to supply water to the dust suppression spray bar system. Water is usually obtained from various sources such as on site water supplies, fire hydrant, lakes, ponds or water truck.

In addition, plant personnel stand on top of the feeder hopper, where the material is dumped in by front loader, dampening the material that is in the loader and the material that is being dumped into this hopper with a high pressure water hose, to control any fugitive emissions generated.

PLANT #2 EQUIPMENT

1. Cedarapids 3054 Jaw Crusher
2. Cedarapids 45046 Impact Crusher
3. Cedarapids Triple Deck Screener (7'x20')
4. Feed Conveyor (4'x30')
5. Screening Conveyor (4'x50')
6. Oversize Belt (4'x60')
7. Material Conveyor (4'x65')
8. Electro Magnet (3'x6')
9. Electro Magnet (3'x6')
- 10.Radial Stacker #1 (4'x90')
- 11.Radial Stacker #2 (4'x80')
- 12.Radial Stacker #3 (4'x60')
- 13.Water Supply
- 14.Caterpillar Generator Set



VII. O & M PLAN

General Maintenance Intervals

The crushing unit and the general area are checked visually, daily for visible emissions. The entire compound inclusive of storage piles are continuously kept damp by a water truck. If any fugitive emissions are seen escaping the crushing plant the source is identified immediately and the problem area is corrected. Fugitive emissions at drop points are controlled by increasing and decreasing the water pressure from 25-40 psi, at the spray bars/heads.

Inspections of various parts of the Self-Made Water Spray Bar / Spray Head Dust Suppression System are done on a daily basis before startup, during operation and after shut down, as well as complete inspection on a weekly basis. If anything is found broken, not functioning or out of the ordinary it is fixed immediately by trained plant personnel. In addition, this dust suppression system is equipped with a spare pump in case of breakdown the spare pump can be used until the other pump can be fixed.

OPERATING PARAMETERS
for
SELF-MADE WATER SPRAY BAR / SPRAY HEAD
DUST SUPPRESSION SYSTEM

Water Pressure to Spray Bars & Spray Heads
Operation Mode

20-45 psi @ each head

Continuous w/ product

Maintenance Log

Description of Maintenance Performed:

Date

Initials

VIII. TYPICAL FUEL ANALYSIS



central company, inc.

PETROLEUM PRODUCTS

CENTRAL OIL COMPANY, INC.

FUEL OIL #2 (DISTILLATE) SPECIFICATIONS

| <u>CHARACTERISTICS</u> | <u>MIN</u> | <u>MAX</u> |
|--------------------------------------|------------|------------|
| GRAVITY, API AT 60°F | 32.3 | |
| SULPHUR, % WT. | | 0.21 |
| POUR POINT, F | | 15. |
| BS & W. % | | 0.2 |
| VISCOSITY, SSU/100F SECS | 33 | 40. |
| VISCOSITY, KINEMATIC CST/40C | 2.0 | 4. |
| FLASH POINT, PM CC, F | 150. | |
| ASH, % WT. | | 0.01 |
| CETANE NUMBER | 40. | |
| CARBON RESIDUE, RAMSBOTTOM (10%) | | 25. |
| CLOUD POINT, F | | 0.01 |
| SEDIMENT BY EXTRACTION, % WT. | C&B | |
| APPEARANCE | | 1.5 |
| COLOR, ASTM | | 1-A |
| CORROSION, COPPER STRIP 3 HRS. 122°F | | "REPORT" |
| BTU PER U.S. GALLON | | 138,500 |