



City of Cleveland
Frank G. Jackson, Mayor

Department of Public Health
Division of Air Quality
75 Erievue Plaza, Suite 200
Cleveland, Ohio 44114-1839
216/664-2297 • Fax: 216/420-8047
www.clevelandhealth.org

SERVING OHIO EPA AS AGENCY 13
FOR CUYAHOGA COUNTY

CERTIFIED MAIL 7001 2510 0006 1130 7752
RETURN RECEIPT REQUESTED

August 6, 2009

Terry Milhoan
Seaforth Mineral & Ore
P.O. Box 397
East Liverpool, OH 43920

NON-HPV

FACILITY ID: 13-18-00-0379

NOTICE OF VIOLATION: Operating without permits and failure to submit city permit fees for calendar years 2007 and 2008

Dear Mr. Milhoan:

On July 28, 2009, the Cleveland Division of Air Quality (CDAQ) inspected Great Lakes Fluorspar located at 2470 Canal Road in Cleveland. This letter serves as notification that you are operating sources in violation of the following applicable air statutes, air regulations, or air permit conditions.

Great Lakes Fluorspar has been operating emissions units P002: Loading/Handling Operations, P003: Storage Piles and P004: Bagging Operations without the required permits since March 7, 2001. This is a violation of Ohio Administrative Code 3745-31-02(A) and Ohio Revised Code 3704.05(G).

In addition, Great Lakes Fluorspar has not submitted city permit fees for calendar years 2007 and 2008. This is a violation of City of Cleveland Codified Ordinances 257.01 and 263.01.

Unless you undertake some type of corrective action with respect to the above noted violations, you will remain in non-compliance. CDAQ requests that Great Lakes Fluorspar submit Permit to Install/Operate (PTIO) applications for emissions units P002, P003 and P004 and a new PTIO application for emissions unit P001: Fluorspar Rotary Drying Kiln reflecting current processes within 30 days of receipt of this letter to the following CDAQ representative:

David Hearne
Cleveland Division of Air Quality
75 Erievue Plaza 2nd Floor
Cleveland, Ohio 44114-1839



CDAQ also requests that Great Lakes Fluorspar submit city permit fees for calendar years 2007 and 2008 within 30 days of receipt of this letter to the following address:

City Permit Division
Cleveland Division of Air Quality
75 Erieview Plaza 2nd Floor
Cleveland, Ohio 44114-1839

Your written response to this letter must be received by CDAQ within thirty (30) days of your receipt of this letter. If there is insufficient time to correct the alleged violations within this timeframe, your response must include a timeline for correcting the alleged violations.

Information regarding Permit to Operate/Install (PTIO) applications can be found online at <http://www.epa.state.oh.us/dapc/permits/PTIOfactsheet.pdf>. Emissions units P002, P003 and P004 may fit criteria for general permits, which can be found online at <http://www.epa.state.oh.us/dapc/genpermit/genpermits.html>. PTIO applications and Emission Activity Category (EAC) forms may be downloaded at <http://www.epa.state.oh.us/dapc/fops/eac/eacforms.html>.

Please note that all permit applications submitted to CDAQ must include original signatures. Photocopied signatures are not valid; the application will not be accepted by CDAQ and will be returned to you if original signatures are not provided.

Violations of Ohio air pollution laws and /or permit terms and conditions are subject to the penalties stipulated in Ohio Revised Code Section 3704.99(A), which allows fines of not more than twenty-five thousand dollars or imprisonment for not more than one year, or both, for each violation.

CDAQ issues this letter with Ohio EPA's concurrence. The failure to mention any specific violation does not excuse any violations of local, state and federal laws or regulations regarding air pollution control. Violations of air pollution control laws may be pursued in local court or referred to Ohio EPA or U.S. EPA for further enforcement action. Should you have any questions, please call Andrew Marantides at (216) 420-8049. All correspondence with CDAQ must include the Ohio EPA facility identification number for Great Lakes Fluorspar: 13-18-00-0379.

Sincerely,

George Baker
Chief of Enforcement
GB/AM

cc: Richard Nemeth and Michael J. Krzywicki, CDAQ
John Paulian, Ohio EPA Central Office
Lisa Holscher, U.S. EPA Region V
Facility File and L\Data\Facilities\1318000379\2009-7-28 NOV.docx

encl: City permit invoices for calendar years 2007 and 2008



Website: polyscience.net

86 North Main St., Chagrin Falls, Ohio 44022 • Phone 440-247-5801 • FAX 440-247-0901

August 14, 2009

Mr. Andrew Marantides, Environmental Enforcement
Division of Air Quality
75 Erieview Plaza, 2nd Floor
Cleveland, Ohio 44114-1839

Mr. David Hearne
Cleveland Division of Air Quality
75 Erieview Plaza, 2nd Floor
Cleveland, Ohio 44114-1839

Re: NOV issues August 6, 2009 for Great Lakes Fluorspar
(OEPA ID #13-180-00379), 2470 Canal Road, Cleveland, Ohio 44113

Dear Messrs. Marantides and Hearne:

Poly Science Engineering Group, Inc. (PSEG) has been engaged by Great Lakes Fluorspar (GLF) to both respond to your recent NOV letter and to prepare GLF's PTIO's as requested by your office.

Poly Science would like to at least make mention of the fact that GLF was never notified by OEPA of their pending renewal date that was due back in 2001 and while both GLF and PSEG recognizes that the obligation to properly file their PTO renewal on time is ours, we would hope that such a notification will be sent the next time this permit requires a renewal. Further, even though the existing permit had lapsed, GLF has been continuing to maintain the conditions required in their permits throughout the lapsed period, since they were unaware of the lapse.

New PTIO's Attached

Per your request, GLF and PSEG have prepared the attached PTIO's for the permits P001, P002, P003 and P004. It is PSEG's contention that the P002 "loading/handling operations" and P003 "storage piles" permit renewals are covered by a single General Permit (GP)7.2 "less than 3.0 mm tons of product

and total pile storage area less than 6.0 acres." This General Permit was unavailable to GLF when the original PTI was submitted in 1998, so OEPA may want to consolidate P002 and P003 into a single permit with GP 7.2 as the basis for both.

The P001 permit for the kiln (rated at 31.8 mm BTU's/hr), which was converted to direct fire through a PTI Modification submitted in 2007, does have 4.752 tons of carbon monoxide emissions/year per the SCC code for process heaters at MPTE of 8760 hrs. Accordingly, this is not deminimis, but CO was not mentioned in the original PTI issued by OEPA in 1998. Actual emission, based on historical utilization of the system (less than 40,000 tpy) would however, be deminimis. All emissions for the bulk truck loading, 3000 lb. supersack, and 50 lb. paper bag filling systems are each deminimis.

Anomaly in GP 7.2

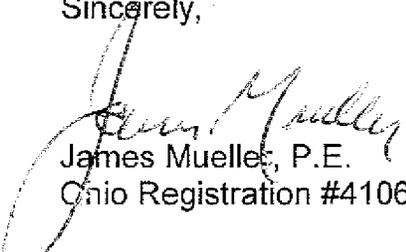
There is a mistake in the actual check-off form for General Permit 7.2. Item No. 7 asks "Is the facility a landfill site?" It then further says in the last paragraph of the check-off form "If the answers to questions 1 through 7 are yes...the above facility meets the above 'qualifying criteria'..."

Poly Science questioned whether a "no" check off box (which is the answer for GLF) should preclude GLF from qualifying for a General Permit 7.2. Per Mr. Bill Juris (OEPA phone # 614-644-3593), he indicated that the "no" check-off is actually the proper qualifying statement for the GP 7.2, the reverse of what was indicated in the last paragraph.

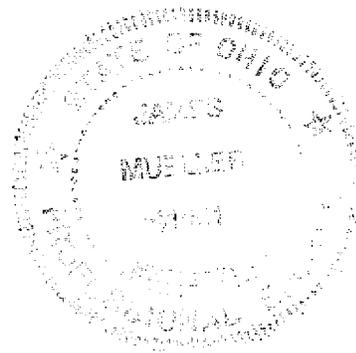
Accordingly, it is Poly Science's opinion that GLF qualifies for GP 7.2 even though the check-off question #7 is "no". Please contact Mr. Juris if there is any question on this matter.

Should you or anyone at CAQD or OEPA have any questions on the attachments or this letter, please do not hesitate to contact Poly Science at 440-247-5801.

Sincerely,


James Mueller, P.E.
Ohio Registration #41061

JM: mh
Attachments





Application for Permit to Install (PTI) and Permit to Install/Operate (PTIO)

Ohio Environmental Protection Agency
Lazarus Government Center
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

For EPA Use Only

Application Number _____

Date Received _____

Facility Information

Note: Application is incomplete if all **bolded** questions throughout the application are not completed.

Legal Facility Name Great Lakes Fluorspar

Alternate Name (if any) _____

Facility Physical Address 2470 Canal Rd

City, ZIP code Cleveland, Ohio 44113

County Cuyahoga

Facility ID 13-180-00379

Facility Description Fluorspar drying facility

NAICS Code 327999

Facility Latitude 41.4 degrees minutes seconds 41.4903286975

Facility Longitude -81.68 degrees minutes seconds -81.6862678527

Core Place ID (if known) _____

SCSC ID (if known) _____

Portable? Yes No

Portable Type Asphalt Plant Concrete Plant Generator Aggregate Processing Concrete Crusher Grinder Other

Initial Location County _____ If "Other", describe: _____



Division of Air Pollution Control
Application for Permit-to-Install or Permit-to-Install and Operate

Section I – General Application Information

This section should be filled out for each permit to install (PTI) or Permit to Install and Operate (PTIO) application. A PTI is required for all air contaminant sources (emissions units) installed or modified after January 1, 1974 that are subject to OAC Chapter 3745-77. A PTIO is required for all air contaminant sources (emissions units) that are not subject to OAC Chapter 3745-77 (Title V). See the application instructions for additional information.

For OEPA use only:	<input type="checkbox"/> Installation <input type="checkbox"/> Modification <input type="checkbox"/> Renewal	<input type="checkbox"/> Request Federally enforceable restrictions <input type="checkbox"/> General Permit <input type="checkbox"/> Other
--------------------	--	--

1. Is the purpose of this application to transition from OAC Chapter 3745-77 (Title V) to OAC Chapter 3745-31 (PTIO)?
 yes no

2. **Establish PER Due Date** - Select an annual Permit Evaluation Report (PER) due date for this facility (does not apply to facilities subject to Title V, OAC Chapter 3745-77). If the PER has previously been established and a change is now desired, a PER Change Request form must be filed instead of selecting a date here.

<u>Due Date:</u>	<u>For Time Period:</u>
<input checked="" type="checkbox"/> February 15	<input type="checkbox"/> January 1 through December 31
<input type="checkbox"/> May 15	<input type="checkbox"/> April 1 through March 31
<input type="checkbox"/> August 15	<input type="checkbox"/> July 1 through June 30
<input type="checkbox"/> November 15	<input type="checkbox"/> October 1 through September 30
<input type="checkbox"/> PER not applicable (Title V) or due date already established	
<input type="checkbox"/> PER Request Permit Change form attached	

3. **Federal Rules Applicability** - Please check all of the appropriate boxes below.

New Source Performance Standards (NSPS)
New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

not affected subject to Subpart: _____
 unknown exempt - explain below

National Emission Standards for Hazardous Air Pollutants (NESHAP)
National Emissions Standards for Hazardous Air Pollutants are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

not affected subject to Subpart: _____
 unknown subject, but exempt - explain below

Maximum Achievable Control Technology (MACT)
The Maximum Achievable Control Technology standards are listed under 40 CFR 63 and OAC rule 3745-31-28.

not affected subject to Subpart: _____
 unknown subject, but exempt - explain below

Prevention of Significant Deterioration (PSD)
These rules are found under OAC rule 3745-31-10 through OAC rule 3745-31-20.

not affected subject to regulation
 unknown

Non-Attainment New Source Review
These rules are found under OAC rule 3745-31-21 through OAC rule 3745-31-27.

not affected subject to regulation
 unknown

112 (r) - Risk Management Plan
These rules are found under 40 CFR 68.

not affected subject to regulation
 unknown

Title IV (Acid Rain Requirements)
These rules are found under 40 CFR 72 and 40 CFR 73.

not affected subject to regulation
 unknown

Please explain why you checked "exempt" in this question for one or more federal rules. Identify each exemption and whether the entire facility and/or the specific air contaminant sources included in this permit application is exempted. Attach an additional page if necessary.

4. Express PTI/PTIO - Do you qualify for express PTI or PTIO processing?

yes no

If yes, are you requesting express processing per OAC rule 3745-31-05?

yes no

5. **Air Contaminant Sources in this Application** - Identify the air contaminant source(s) for which you are applying below. Attach additional pages if necessary. Section II of this application and an EAC form should be completed for each air contaminant source.

Emissions Unit ID*	Company Equipment ID (company's name for air contaminant source)	Equipment Description (List all equipment that are a part of this air contaminant source)
P001	Direct gas fired Fluorspar rotary drying kiln	Natural gas fired rotary drying kiln w/baghouse exhaust
P002	Loading, unloading and handling of Calcium Fluorspar	Front end loaders, conveyor/stackers, tarps, watering system
P003	Fluorspar Storage Piles	Tarps, watering system
P004	Bagging systems for Fluorspar	Supersack bagging stations(2), and (1) 50 lb bagger station

* This ID would have been created when a previous air permit was issued. If no previous permits have been issued for this air contaminant source, leave this field blank. If this air contaminant source was previously identified in STARShip applications as a "Z" source (e.g., Z001), please provide that identification and a new ID will be assigned when the PTI/PTIO is issued.

6. Trade Secret Information - Is any information included in this application being claimed as a trade secret per Ohio Revised Code (ORC) 3704.08?

yes (A "non-confidential" version must also be submitted in order for this application to be deemed complete.)
 no

7. Permit Application Contact - Person to contact for questions about this application:

Michael
Milhoan

PlantManager

Name

Title

2470CanalRoad
ClevelandOhio44113

Address (Street, City/Township, State and Zip Code)

2166217465

Phone

Fax

E-mail

8. **Authorized Signature** – OAC rule 3745-31-04 states that applications for permits to install or permits to install and operate shall be signed:
- (1) In the case of a corporation, by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility.
 - (2) In the case of a partnership by a general partner.
 - (3) In the case of sole proprietorship, by the proprietor, and
 - (4) In the case of a municipal, state, federal or other governmental facility, by the principal executive officer, the ranking elected official, or other duly authorized employee.

Under OAC rule 3745-31-04, this signature shall constitute personal affirmation that all statements or assertions of fact made in the application are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

8/19/2009

Authorized Signature (for facility)

Date

JAMES A. McCLURG

PRESIDENT

Print Name

Title

Section II - Specific Air Contaminant Source Information

Facility ID: 13-180-00611

Emissions Unit ID: Pool

Company Equipment ID: Boiler #123

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** – Check all that apply (must be completed regardless of date of installation or modification):

New installation (for which construction has not yet begun, in accordance with OAC rule 3745-31-33). When will you begin to install the air contaminant source?

(month/year) _____ **OR** 9 after installation permit has been issued

Initial application for an air contaminant source already installed or under construction. Identify installation date or the date construction began (month/year) _____ and the date operation began (month/year) _____

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

When will you begin to modify the air contaminant source? (month/year) _____ **OR** 9 after modification permit has been issued

Modification application for an air contaminant source which has been or is currently being modified. List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

Identify modification date or the date modification began (month/year) _____ and the date operation began (month/year) _____

Reconstruction of an existing air contaminant source/facility. Please explain: _____

Renewal of an existing permit-to-operate (PTO) or PTIO
Identify the date operation began after installation or latest modification (month/year) _____

General Permit General Permit Category _____ General Permit Type _____
Complete, sign and attach the appropriate Qualifying Criteria Document

Other, please explain: _____

Section II - Specific Air Contaminant Source Information

Facility ID: 13-124-00378

Emissions Unit ID: Pool

Company Equipment ID: Dryer KILN

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

3-05-025-08 3-05-027-20

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.

- If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
- Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
- Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
- If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
- Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions* (lb/hr)	Actual emissions* (ton/year)	Requested Allowable* (lb/hr)	Requested Allowable* (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	16.0 lbs/hr	0.160 lbs/hr	0.70 tpy	2.14 lbs/hr	9.373 tpy
PM # 10 microns in diameter (PE/PM ₁₀)					
PM # 2.5 microns in diameter (PE/PM _{2.5})					
Sulfur dioxide (SO ₂)	DEMINIMIS				
Nitrogen oxides (NO _x)	4.34 lbs/hr	4.34 lbs/hr	19.00 tpy	4.34 lbs/hr	19.00 tpy
Carbon monoxide (CO)					
Organic compounds (OC)					
Volatile organic compounds (VOC)	DEMINIMIS				
Lead (Pb)					
Total Hazardous Air Pollutants (HAPs)					
Highest single HAP:					
Toxic Air Contaminants (see instructions):					

* Provide your calculations as an attachment and explain how all process variables and emission factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

4. **Best Available Technology (BAT)** - For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

5. **Control Equipment** - Does this air contaminant source employ emissions control equipment?

Yes - fill out the applicable information below.

Section II - Specific Air Contaminant Source Information

Facility ID: 13-180-00379

Emissions Unit ID: Pool

Company Equipment ID: Dene kiln

No - proceed to Question 6.

Select the type(s) of control equipment employed below (required data for selected control equipment in bold):

Pollutant abbreviations

PE/PM = Particulate emissions (formerly particulate matter)

PE/PM10 = PM # 10 microns in diameter

PE/PM2.5 = PM # 2.5 microns in diameter

OC = Organic compounds

VOC = Volatile organic compounds

SO2 = Sulfur dioxide

NOx = Nitrogen oxides

CO = Carbon monoxide

Pb = Lead

Adsorber

Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:

Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:

Design control efficiency (%): Basis for efficiency:

Operating control efficiency (%): Basis for efficiency:

Type: Fluidized Bed, Fixed Bed, Moving Bed, Disposable, Concentrator, Other

Adsorption Media:

For Fluidized Bed, Fixed Bed, Moving Bed and Disposable only:

Maximum design outlet organic compound concentration (ppmv):

Media replacement frequency or regeneration cycle time (specify units):

Maximum temperature of the media bed, after regeneration (including any cooling cycle):

For Concentrator Only:

Design regeneration cycle time (minutes):

Minimum desorption air stream temperature (°F):

Rotational rate (revolutions/hour):

Inlet gas flow rate (acfm): Outlet gas flow rate (acfm):

Inlet gas temperature (°F): Outlet gas temperature (°F):

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary, Secondary, Parallel

List all other air contaminant sources that are also vented to this control equipment:

List all egress point IDs (from Table 7-A) associated with this control equipment:

Catalytic Converter

Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:

Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:

Design control efficiency (%): Basis for efficiency:

Operating control efficiency (%): Basis for efficiency:

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary, Secondary, Parallel

List all other air contaminant sources that are also vented to this control equipment:

List all egress point IDs (from Table 7-A) associated with this control equipment:

Catalytic Incinerator

Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:

Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:

Design control efficiency (%): Basis for efficiency:

Operating control efficiency (%): Basis for efficiency:

Combustion chamber residence time (seconds):

Minimum temperature difference (°F) across catalyst during air contaminant source operation:

Inlet gas flow rate (acfm): Outlet gas flow rate (acfm):

Minimum inlet gas temperature (°F): Outlet gas temperature (°F):

This is the only control equipment on this air contaminant source

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Type: Dry Wet Other: _____

Number of operating fields: _____

Secondary voltage (V) range (minimum - maximum): _____

Secondary current (milliamperes) range (minimum - maximum): _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Fabric Filter/Baghouse
Manufacturer: MICROPUL Year installed: 1970 Your ID for control equipment Baghouse

Describe this control equipment: Automatic blowdown baghouse

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): 99 Basis for efficiency: engineering

judgement

Design control efficiency (%): 99 Basis for efficiency: Manufacturers

specs

Operating control efficiency (%): 98 Basis for efficiency: _____

Calculated

Operating pressure drop range (inches of water): Minimum: 2.0 Maximum: 7.0

Pressure type: Negative pressure Positive pressure

Fabric cleaning mechanism: Reverse air Pulse jet Shaker Other _____

Bag leak detection system: Yes No Type: _____

Lime injection or fabric coating agent used: Type: _____ Feed rate: _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Flare
Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment: _____

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Type: Enclosed Elevated (open)

If Elevated (open): Air-assisted Steam-assisted Non-assisted

Ignition device: Electric arc Pilot flame

Flame presence sensor: Yes No

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Fugitive Dust Suppression

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Wet Scrubber

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Operating pressure drop range (inches of water): Minimum: _____ Maximum: _____

Type: Impingement Packed bed Spray chamber Venturi Other: _____

pH range for scrubbing liquid: Minimum: _____ Maximum: _____

Is scrubber liquid recirculated? Yes No

Scrubber liquid flow rate (gal/min): _____

Scrubber liquid supply pressure (psig): _____ NOTE: This item for spray chambers only.

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Other

Type: describe _____

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

6. **Process Flow Diagram** - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

7. **Modeling information:** (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required.) An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.

Complete Tables 7-A and 7-C for stack emissions egress points and/or Table 7-B and 7-C for fugitive emissions egress points below if the requested allowable annual emission rate for this PTI or PTIO exceeds any of the following:

- Particulate Emissions (PE/PM₁₀): 10 tons per year
- Sulfur Dioxide (SO₂): 25 tons per year
- Nitrogen Oxides (NO_x): 25 tons per year

- Carbon Monoxide (CO): 100 tons per year
- Lead (Pb): 0.6 ton per year
- Toxic Air Contaminants: 1 ton per year. Toxic air contaminants are identified in OAC rule 3745-114-01.

Complete Table 7-A below for each stack emissions egress point. An egress point is a point at which emissions from an air contaminant source are released into the ambient (outside) air. List each individual egress point on a separate pair of lines. In each case, use the dimensions of the tallest nearby (or attached) building, building segment or structure.

Table 7-A, Stack Egress Point Information

1 Company ID for the Egress Point	Type Code*	Dimensions or Diameter	Height from the Ground (ft)	Temp. at Max. Operation (F)	Flow Rate at Max. Operation (ACFM)	Minimum Distance to Fence Line (ft)
Company Description for the Egress Point	Shape: round, square, rectangular	Cross Sectional Area	Base Elevation (ft)	Building Height (ft)	Building Width (ft)	Building Length (ft)

2 Company ID for the Egress Point	Type Code*	Dimensions or Diameter	Height from the Ground (ft)	Temp. at Max. Operation (F)	Flow Rate at Max. Operation (ACFM)	Minimum Distance to Fence Line (ft)
Company Description for the Egress Point	Shape: round, square, rectangular	Cross Sectional Area	Base Elevation (ft)	Building Height (ft)	Building Width (ft)	Building Length (ft)

3 Company ID for the Egress Point	Type Code*	Dimensions or Diameter	Height from the Ground (ft)	Temp. at Max. Operation (F)	Flow Rate at Max. Operation (ACFM)	Minimum Distance to Fence Line (ft)
Company Description for the Egress Point	Shape: round, square, rectangular	Cross Sectional Area	Base Elevation (ft)	Building Height (ft)	Building Width (ft)	Building Length (ft)

4 Company ID for the Egress Point	Type Code*	Dimensions or Diameter	Height from the Ground (ft)	Temp. at Max. Operation (F)	Flow Rate at Max. Operation (ACFM)	Minimum Distance to Fence Line (ft)
Company Description for the Egress Point	Shape: round, square, rectangular	Cross Sectional Area	Base Elevation (ft)	Building Height (ft)	Building Width (ft)	Building Length (ft)

*Type codes for stack egress points:

- A. vertical stack (unobstructed): There are no obstructions to upward flow in or on the stack such as a rain cap.

Section II - Specific Air Contaminant Source Information

Facility ID: _____

Emissions Unit ID: _____

Company Equipment ID: _____

- B. vertical stack (obstructed): There are obstructions to the upward flow, such as a rain cap, which prevents or inhibits the air flow in a vertical direction.
- C. non-vertical stack: The stack directs the air flow in a direction which is not directly upward.

Complete Table 7-B below for each fugitive emissions egress point. List each individual egress point on a separate line. Refer to the description of the fugitive egress point types below the table for use in completing the type column of the table. For an air contaminant source with multiple fugitive emissions egress points, include only the primary egress points.

Table 7-B, Fugitive Egress Point Information

1 Company ID or Name for the Egress Point	Type* (check one) <input type="checkbox"/> Area <input type="checkbox"/> Volume	Area Source Dimensions (Length x Width, in feet)	Volume Source Dimensions (Height x Width, in feet)
Company Description for the Egress Point	Release Height (ft)	Exit Gas Temp. (only if in excess of 100°F) (°F)	Minimum Distance to the Fence Line (ft)

2 Company ID or Name for the Egress Point	Type* (check one) <input type="checkbox"/> Area <input type="checkbox"/> Volume	Area Source Dimensions (Length x Width, in feet)	Volume Source Dimensions (Height x Width, in feet)
Company Description for the Egress Point	Release Height (ft)	Exit Gas Temp. (only if in excess of 100°F) (°F)	Minimum Distance to the Fence Line (ft)

3 Company ID or Name for the Egress Point	Type* (check one) <input type="checkbox"/> Area <input type="checkbox"/> Volume	Area Source Dimensions (Length x Width, in feet)	Volume Source Dimensions (Height x Width, in feet)
Company Description for the Egress Point	Release Height (ft)	Exit Gas Temp. (only if in excess of 100°F) (°F)	Minimum Distance to the Fence Line (ft)

*Types for fugitive egress point:

Area: an open fugitive source characterized as a horizontal area (L x W) with a release height. For irregular surfaces such as storage piles, enter dimensions of an average cross section; release height is entered as half of the maximum pile height. For process sources such as crushers, use the process opening (e.g., area of crusher hopper opening) and ignore material handling and storage emissions points.

Volume: an unpowered vertical opening, such as a window or roof monitor, characterized as a vertical area (W x H) with a release height, measured at the midpoint of the opening. Multiple openings in a building may be averaged, if necessary.

Use the same Company Name or ID for the Egress Point in Table 7-C that was used in Table 7-A or 7-B. See the line-by-line PTI/PTIO instructions for additional information.

Table 7-C, Egress Point Location

Company Name or ID for the Egress Point (as identified above)	Egress Point Latitude			Egress Point Longitude		
	deg	min	sec	deg	min	sec
	deg	min	sec	deg	min	sec
	deg	min	sec	deg	min	sec
	deg	min	sec	deg	min	sec
	deg	min	sec	deg	min	sec

8. Request for Enforceable Restrictions - As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting state-only enforceable limits or state and federally enforceable limits to obtain synthetic minor status)?

- yes
- no
- not sure - please contact me to discuss whether this affects the facility.

If yes, why are you requesting enforceable restrictions? Check all that apply.

- a. to avoid being a major Title V source (see OAC rule 3745-77-01 and OAC rule 3745-31)
- b. to avoid being a major MACT source (see OAC rule 3745-31-01)
- c. to avoid being a major stationary source (see OAC rule 3745-31-01)
- d. to avoid being a major modification (see OAC rule 3745-31-01)
- e. to avoid an air dispersion modeling requirement (see Engineering Guide # 69)
- f. to avoid BAT requirements (see OAC rule 3745-31-05(A)(3)(b))
- g. to avoid another requirement. Describe: _____

If you checked a., b. or c., please attach a facility-wide potential to emit (PTE) analysis (for each pollutant) and synthetic minor strategy to this application. (See application instructions for definition of PTE.) If you checked d., please attach a net emission change analysis to this application. If you checked e., f. or g., please attach a description of the restrictions proposed and how compliance with those restrictions will be verified.

9. Continuous Emissions Monitoring – Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.

- yes
- no

If yes, complete the following information.

Company Name or ID for the Egress Point _____

CEM Description _____

This CEM monitors (check all that apply):

Opacity Flow CO NOx SO₂ THC HCl HF H₂S TRS CO₂ O₂ PM

10. **EAC Forms** - The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source unless a general permit is being requested. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form corresponds to this air contaminant source.

EAC 3101 _____

EMISSIONS ACTIVITY CATEGORY FORM FUEL BURNING OPERATION

This form is to be completed for each fuel burning operation. State/Federal regulations which may apply to fuel burning operations are listed in the instructions. Note that there may be other regulations which apply to this emissions unit which are not included in this list

1. Reason this form is being submitted (check one)

- New Permit Renewal or Modification of Air Permit Number(s) (e.g. B001)_P001_____

2. Maximum Operating Schedule: 24 hours per day; 312 days per year

If the schedule is less than 24 hours/day or 365 days/year, what limits the schedule to less than maximum? See instructions for examples. Company never works on Sundays _____

3. Input Capacity (million Btu/hr):

Rated <small>(Indicate units if other than mmBtu/hr)</small>	Maximum <small>(Indicate units if other than mmBtu/hr)</small>	Normal <small>(Indicate units if other than mmBtu/hr)</small>
31.8 mmBtu/hr	31.8 mmBtu/hr	20 - 25 mmBtu/hr

4. Output Capacity:

Rated <small>(lb steam/hr)</small>	Maximum <small>(lb steam/hr)</small>	Normal <small>(lb steam/hr)</small>

Not applicable - operation does not produce steam.

5. Percent of Operating Time Used for:

Process: 100 %
 Space Heat: _____ %

6. Type of Draft (check one):

- Natural Induced Forced

7. Type of combustion monitoring (check one):

- Fuel/Air Ratio Oxygen None
 Other (describe) _____

8. Type of Fuel Fired (complete all that apply):

Fuel*	Fired as...	Min. Heat Content (Btu/unit)	Max. % Ash	Max. % Sulfur	Max. Annual Fuel Use	Average Hourly Fuel Use	Maximum Hourly Fuel Use
Coal	<input type="checkbox"/> Primary <input type="checkbox"/> Backup				tons	lbs	lbs
No. 2 Fuel Oil	<input type="checkbox"/> Primary <input type="checkbox"/> Backup				gal	gal	gal
No. 6 Fuel Oil	<input type="checkbox"/> Primary <input type="checkbox"/> Backup				gal	gal	gal
Other** Oil	<input type="checkbox"/> Primary <input type="checkbox"/> Backup				gal	gal	gal
Natural Gas	<input checked="" type="checkbox"/> Primary <input type="checkbox"/> Backup	960 Btu/cuFt			232.0 mm ft ³	20 - 25 m ft ³	31.8 m ft ³
Wood	<input type="checkbox"/> Primary <input type="checkbox"/> Backup				tons	lbs	lbs
LPG	<input type="checkbox"/> Primary <input type="checkbox"/> Backup				gal	gal	gal
Other**	<input type="checkbox"/> Primary <input type="checkbox"/> Backup						
Other**	<input type="checkbox"/> Primary <input type="checkbox"/> Backup						

* Please identify all combinations of fuels that are co-fired: _____

** Identify other fuel(s): _____

Coal-Fired Units

9. Type of Coal Firing (check one):

- Pulverized-Wet Bottom
 Hand-Fired
 Chain Grate
 Traveling Grate
 Pulverized-Dry Bottom
 Cyclones
 Spreader Stoker
 Fluidized Bed
 Underfeed Stoker
 Other (describe) _____

10. Flyash Reinjection:

- Yes No

11. Overfire Air:

- Yes No

Oil-Fired Units

12. Oil Preheater:

- Yes - Indicate Temperature _____ deg. F
 No

Section II - Specific Air Contaminant Source Information

Facility ID: 13-180-00379

Emissions Unit ID: P002

Company Equipment ID: Loading and handling operations

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** – Check all that apply (must be completed regardless of date of installation or modification):

New installation (for which construction has not yet begun, in accordance with OAC rule 3745-31-33). When will you begin to install the air contaminant source?

(month/year) _____ **OR** 9 after installation permit has been issued

Initial application for an air contaminant source already installed or under construction. Identify installation date or the date construction began (month/year) _____ and the date operation began (month/year) _____

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

When will you begin to modify the air contaminant source? (month/year) _____ **OR** 9 after modification permit has been issued

Modification application for an air contaminant source which has been or is currently being modified. List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

Identify modification date or the date modification began (month/year) _____ and the date operation began (month/year) _____

Reconstruction of an existing air contaminant source/facility. Please explain: _____

Renewal of an existing permit-to-operate (PTO) or PTIO

Identify the date operation began after installation or latest modification (month/year) _____

General Permit General Permit Category PTIO Renewal General Permit Type GP 7.2

Storage piles, in and out load, windlosses _____

Complete, sign and attach the appropriate Qualifying Criteria Document

Other, please explain: _____

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

3-05-025-03 3-05-025-05 3-05-025-06

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.

- If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
- Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
- Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
- If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
- Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions* (lb/hr)	Actual emissions* (ton/year)	Requested Allowable* (lb/hr)	Requested Allowable* (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)					6.4 tpy *
PM # 10 microns in diameter (PE/PM ₁₀)					3.1 tpy *
PM # 2.5 microns in diameter (PE/PM _{2.5})					
Sulfur dioxide (SO ₂)					
Nitrogen oxides (NO _x)					
Carbon monoxide (CO)					
Organic compounds (OC)					
Volatile organic compounds (VOC)					
Lead (Pb)					
Total Hazardous Air Pollutants (HAPs)					
Highest single HAP:					
Toxic Air Contaminants (see instructions):					*General Permit 7.2

* Provide your calculations as an attachment and explain how all process variables and emission factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

3. **Best Available Technology (BAT)** - For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection: See General Permit 7.2

4. _____

5. **Control Equipment** - Does this air contaminant source employ emissions control equipment?

Company Equipment ID: Loading and handling operations

- Yes - fill out the applicable information below.
No - proceed to Question 6.

Select the type(s) of control equipment employed below (required data for selected control equipment in bold):

Pollutant abbreviations

PE/PM = Particulate emissions (formerly particulate matter)
PE/PM10 = PM # 10 microns in diameter
PE/PM2.5 = PM # 2.5 microns in diameter
OC = Organic compounds
VOC = Volatile organic compounds
SO2 = Sulfur dioxide
NOx = Nitrogen oxides
CO = Carbon monoxide
Pb = Lead

Adsorber
Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:
Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:
Design control efficiency (%): Basis for efficiency:
Operating control efficiency (%): Basis for efficiency:
Type: Fluidized Bed, Fixed Bed, Moving Bed, Disposable, Concentrator, Other

Adsorption Media:
For Fluidized Bed, Fixed Bed, Moving Bed and Disposable only:
Maximum design outlet organic compound concentration (ppmv):
Media replacement frequency or regeneration cycle time (specify units):
Maximum temperature of the media bed, after regeneration (including any cooling cycle):

For Concentrator Only:
Design regeneration cycle time (minutes):
Minimum desorption air stream temperature (°F):
Rotational rate (revolutions/hour):
Inlet gas flow rate (acfm): Outlet gas flow rate (acfm):
Inlet gas temperature (°F): Outlet gas temperature (°F):

This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary, Secondary, Parallel
List all other air contaminant sources that are also vented to this control equipment:
List all egress point IDs (from Table 7-A) associated with this control equipment:

Catalytic Converter
Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:
Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:
Design control efficiency (%): Basis for efficiency:
Operating control efficiency (%): Basis for efficiency:
This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary, Secondary, Parallel
List all other air contaminant sources that are also vented to this control equipment:
List all egress point IDs (from Table 7-A) associated with this control equipment:

Catalytic Incinerator
Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:
Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:
Design control efficiency (%): Basis for efficiency:
Operating control efficiency (%): Basis for efficiency:
Combustion chamber residence time (seconds):
Minimum temperature difference (°F) across catalyst during air contaminant source operation:
Inlet gas flow rate (acfm): Outlet gas flow rate (acfm):

Company Equipment ID: Loading and handling operations

Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:

Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:

Design control efficiency (%): Basis for efficiency:

Operating control efficiency (%): Basis for efficiency:

Type: Dry, Wet, Other

Number of operating fields:

Secondary voltage (V) range (minimum - maximum):

Secondary current (milliamperes) range (minimum - maximum):

Inlet gas flow rate (acfm): Outlet gas flow rate (acfm):

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary, Secondary, Parallel

List all other air contaminant sources that are also vented to this control equipment:

List all egress point IDs (from Table 7-A) associated with this control equipment:

Fabric Filter/Baghouse

Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:

Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:

Design control efficiency (%): Basis for efficiency:

Operating control efficiency (%): Basis for efficiency:

Operating pressure drop range (inches of water): Minimum: Maximum:

Pressure type: Negative pressure, Positive pressure

Fabric cleaning mechanism: Reverse air, Pulse jet, Shaker, Other

Bag leak detection system: Yes, No Type:

Lime injection or fabric coating agent used: Type: Feed rate:

Inlet gas flow rate (acfm): Outlet gas flow rate (acfm):

Inlet gas temperature (°F): Outlet gas temperature (°F):

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary, Secondary, Parallel

List all other air contaminant sources that are also vented to this control equipment:

List all egress point IDs (from Table 7-A) associated with this control equipment:

Flare

Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:

Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:

Design control efficiency (%): Basis for efficiency:

Operating control efficiency (%): Basis for efficiency:

Type: Enclosed, Elevated (open)

If Elevated (open): Air-assisted, Steam-assisted, Non-assisted

Ignition device: Electric arc, Pilot flame

Flame presence sensor: Yes, No

Inlet gas flow rate (acfm): Outlet gas flow rate (acfm):

Inlet gas temperature (°F): Outlet gas temperature (°F):

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary, Secondary, Parallel

List all other air contaminant sources that are also vented to this control equipment:

List all egress point IDs (from Table 7-A) associated with this control equipment:

Fugitive Dust Suppression

Suppressant Type: Water, Chemical, Calcium chloride, Asphaltic cement, Other

Tarps

Company Equipment ID: Loading and handling operations

Method of application: Spray, Cover piles

Application rate (specify units): _____

Application frequency: As Needed

List all egress point IDs (from Table 7-B) associated with this control strategy: _____

NOx Reduction Technology

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment: _____

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

NOx Reduction Type: Selective Catalytic Non-Selective Catalytic Selective Non-Catalytic

Inlet temp.: _____ Outlet temp.: _____

Inlet gas flow rate (acfm): _____

For Selective types only:

Reagent type: _____

Reagent injection rate (specify units): _____

Reagent slip (acfm): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Passive Filter

Type: Bin vent Paint booth filter Filter sock Other: _____ Your ID for filter _____

Design control efficiency (%): _____ Basis for efficiency: _____

Change frequency: _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Settling Chamber

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment: _____

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Length x Width x Height: _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Thermal Incinerator/Thermal Oxidizer

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment: _____

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Minimum operating temp. (°F) and sensor location: _____ (See application instructions)

Combustion chamber residence time (seconds): _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

Company Equipment ID: Loading and handling operations

8. Request for Enforceable Restrictions - As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting state-only enforceable limits or state and federally enforceable limits to obtain synthetic minor status)?

- yes
- no
- not sure - please contact me to discuss whether this affects the facility.

If yes, why are you requesting enforceable restrictions? Check all that apply.

- a. to avoid being a major Title V source (see OAC rule 3745-77-01 and OAC rule 3745-31)
- b. to avoid being a major MACT source (see OAC rule 3745-31-01)
- c. to avoid being a major stationary source (see OAC rule 3745-31-01)
- d. to avoid being a major modification (see OAC rule 3745-31-01)
- e. to avoid an air dispersion modeling requirement (see Engineering Guide # 69)
- f. to avoid BAT requirements (see OAC rule 3745-31-05(A)(3)(b))
- g. to avoid another requirement. Describe: _____

If you checked a., b. or c., please attach a facility-wide potential to emit (PTE) analysis (for each pollutant) and synthetic minor strategy to this application. (See application instructions for definition of PTE.) If you checked d., please attach a net emission change analysis to this application. If you checked e., f. or g., please attach a description of the restrictions proposed and how compliance with those restrictions will be verified.

9. Continuous Emissions Monitoring – Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.

- yes
- no

If yes, complete the following information.

Company Name or ID for the Egress Point _____

CEM Description _____

This CEM monitors (check all that apply):

Opacity Flow CO NOx SO₂ THC HCl HF H₂S TRS CO₂ O₂ PM

10. **EAC Forms** - The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source unless a general permit is being requested. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form corresponds to this air contaminant source.

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. Air Contaminant Source Installation or Modification Schedule – Check all that apply (must be completed regardless of date of installation or modification):

New installation (for which construction has not yet begun, in accordance with OAC rule 3745-31-33). When will you begin to install the air contaminant source?

(month/year) _____ OR 9 after installation permit has been issued

Initial application for an air contaminant source already installed or under construction. Identify installation date or the date construction began (month/year) _____ and the date operation began (month/year) _____

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

When will you begin to modify the air contaminant source? (month/year) _____ OR 9 after modification permit has been issued

Modification application for an air contaminant source which has been or is currently being modified. List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

Identify modification date or the date modification began (month/year) _____ and the date operation began (month/year) _____

Reconstruction of an existing air contaminant source/facility. Please explain: _____

Renewal of an existing permit-to-operate (PTO) or PTIO

Identify the date operation began after installation or latest modification (month/year) _____

General Permit General Permit Category_PTIO Renewal _____ General Permit Type GP 7.2 - Storage Piles _____

Complete, sign and attach the appropriate Qualifying Criteria Document

Other, please explain: _____

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

3-05-025-02

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.

- If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
- Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
- Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
- If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
- Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions* (lb/hr)	Actual emissions* (ton/year)	Requested Allowable* (lb/hr)	Requested Allowable* (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)					6.4 tpy*
PM # 10 microns in diameter (PE/PM ₁₀)					3.1 tpy*
PM # 2.5 microns in diameter (PE/PM _{2.5})					
Sulfur dioxide (SO ₂)					
Nitrogen oxides (NO _x)					
Carbon monoxide (CO)					
Organic compounds (OC)					
Volatile organic compounds (VOC)					
Lead (Pb)					
Total Hazardous Air Pollutants (HAPs)					
Highest single HAP:					
Toxic Air Contaminants (see instructions):					*General Permit 7.2

* Provide your calculations as an attachment and explain how all process variables and emission factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

4. **Best Available Technology (BAT)** - For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

5. **Control Equipment** - Does this air contaminant source employ emissions control equipment?

Company Equipment ID: Storage Piles

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM10 PE/PM2.5 OC VOC
 SO2 NOx CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Type: Dry Wet Other: _____

Number of operating fields: _____

Secondary voltage (V) range (minimum - maximum): _____

Secondary current (milliamperes) range (minimum - maximum): _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Fabric Filter/Baghouse

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM10 PE/PM2.5 OC VOC
 SO2 NOx CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Operating pressure drop range (inches of water): Minimum: _____ Maximum: _____

Pressure type: Negative pressure Positive pressure

Fabric cleaning mechanism: Reverse air Pulse jet Shaker Other _____

Bag leak detection system: Yes No Type: _____

Lime injection or fabric coating agent used: Type: _____ Feed rate: _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Flare

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM10 PE/PM2.5 OC VOC
 SO2 NOx CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Type: Enclosed Elevated (open)

If Elevated (open): Air-assisted Steam-assisted Non-assisted

Ignition device: Electric arc Pilot flame

Flame presence sensor: Yes No

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Fugitive Dust Suppression

Suppressant Type: Water Chemical Calcium chloride Asphaltic cement Other_Tarps

Method of application:
Application rate (specify units):
Application frequency: As Needed
List all egress point IDs (from Table 7-B) associated with this control strategy:

NOx Reduction Technology
Manufacturer:
Year installed:
Your ID for control equipment
Describe this control equipment:
Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, SO2, NOx, CO, OC, Pb, VOC, Other
Estimated capture efficiency (%):
Design control efficiency (%):
Operating control efficiency (%):
NOx Reduction Type: Selective Catalytic, Non-Selective Catalytic, Selective Non-Catalytic
Inlet temp.:
Outlet temp.:
Inlet gas flow rate (acfm):
For Selective types only:
Reagent type:
Reagent injection rate (specify units):
Reagent slip (acfm):
This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary, Secondary, Parallel
List all other air contaminant sources that are also vented to this control equipment:
List all egress point IDs (from Table 7-A) associated with this control equipment:

Passive Filter
Type: Bin vent, Paint booth filter, Filter sock, Other:
Your ID for filter
Design control efficiency (%):
Basis for efficiency:
Change frequency:
Inlet gas flow rate (acfm):
Outlet gas flow rate (acfm):
List all egress point IDs (from Table 7-A) associated with this control equipment:

Settling Chamber
Manufacturer:
Year installed:
Your ID for control equipment
Describe this control equipment:
Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, SO2, NOx, CO, OC, Pb, VOC, Other
Estimated capture efficiency (%):
Design control efficiency (%):
Operating control efficiency (%):
Length x Width x Height:
This is the only control equipment on this air contaminant source
If not, this control equipment is: Primary, Secondary, Parallel
List all other air contaminant sources that are also vented to this control equipment:
List all egress point IDs (from Table 7-A) associated with this control equipment:

Thermal Incinerator/Thermal Oxidizer
Manufacturer:
Year installed:
Your ID for control equipment
Describe this control equipment:
Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, SO2, NOx, CO, OC, Pb, VOC, Other
Estimated capture efficiency (%):
Design control efficiency (%):
Operating control efficiency (%):
Minimum operating temp. (°F) and sensor location:
Combustion chamber residence time (seconds):
Inlet gas flow rate (acfm):
Outlet gas flow rate (acfm):
Inlet gas temperature (°F):
Outlet gas temperature (°F):
This is the only control equipment on this air contaminant source

8. Request for Enforceable Restrictions - As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting state-only enforceable limits or state and federally enforceable limits to obtain synthetic minor status)?

- yes
no
not sure - please contact me to discuss whether this affects the facility.

If yes, why are you requesting enforceable restrictions? Check all that apply.

- a. to avoid being a major Title V source
b. to avoid being a major MACT source
c. to avoid being a major stationary source
d. to avoid being a major modification
e. to avoid an air dispersion modeling requirement
f. to avoid BAT requirements
g. to avoid another requirement. Describe:

If you checked a., b. or c., please attach a facility-wide potential to emit (PTE) analysis (for each pollutant) and synthetic minor strategy to this application. (See application instructions for definition of PTE.) If you checked d., please attach a net emission change analysis to this application. If you checked e., f. or g., please attach a description of the restrictions proposed and how compliance with those restrictions will be verified.

9. Continuous Emissions Monitoring - Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.

- yes
no

If yes, complete the following information.

Company Name or ID for the Egress Point

CEM Description

This CEM monitors (check all that apply):

- Opacity
Flow
CO
NOx
SO2
THC
HCl
HF
H2S
TRS
CO2
O2
PM

10. EAC Forms - The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source unless a general permit is being requested. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form corresponds to this air contaminant source.

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. Air Contaminant Source Installation or Modification Schedule – Check all that apply (must be completed regardless of date of installation or modification):

[] New installation (for which construction has not yet begun, in accordance with OAC rule 3745-31-33). When will you begin to install the air contaminant source?

(month/year) _____ OR 9 after installation permit has been issued

[] Initial application for an air contaminant source already installed or under construction. Identify installation date or the date construction began (month/year) _____ and the date operation began (month/year) _____

[] Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

When will you begin to modify the air contaminant source? (month/year) _____ OR 9 after modification permit has been issued

[] Modification application for an air contaminant source which has been or is currently being modified. List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):

Identify modification date or the date modification began (month/year) _____ and the date operation began (month/year) _____

[] Reconstruction of an existing air contaminant source/facility. Please explain: _____

[x] Renewal of an existing permit-to-operate (PTO) or PTIO

Identify the date operation began after installation or latest modification (month/year) _____

[] General Permit General Permit Category _____ General Permit Type _____

Complete, sign and attach the appropriate Qualifying Criteria Document

[] Other, please explain: _____

Company Equipment ID: Fluorspar bagging operations

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

3-05-025-06 _____ 3-05-025-03 _____

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.

- If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
- Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
- Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
- If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
- Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions* (lb/hr)	Actual emissions* (ton/year)	Requested Allowable* (lb/hr)	Requested Allowable* (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	2 – 3 lbs/hr	0.5 lbs/hr	1.1 tpy	1.0 lbs/hr	2.0 tpy
PM # 10 microns in diameter (PE/PM ₁₀)					
PM # 2.5 microns in diameter (PE/PM _{2.5})					
Sulfur dioxide (SO ₂)					
Nitrogen oxides (NO _x)					
Carbon monoxide (CO)					
Organic compounds (OC)					
Volatile organic compounds (VOC)					
Lead (Pb)					
Total Hazardous Air Pollutants (HAPs)					
Highest single HAP:					
Toxic Air Contaminants (see instructions):					

* Provide your calculations as an attachment and explain how all process variables and emission factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

4. **Best Available Technology (BAT)** - For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

5. **Control Equipment** - Does this air contaminant source employ emissions control equipment?

Yes - fill out the applicable information below.

Company Equipment ID: Fluorspar bagging operations

No - proceed to Question 6.

Select the type(s) of control equipment employed below (required data for selected control equipment in bold):

Pollutant abbreviations

PE/PM = Particulate emissions (formerly particulate matter)

PE/PM₁₀ = PM # 10 microns in diameter

PE/PM_{2.5} = PM # 2.5 microns in diameter

OC = Organic compounds

VOC = Volatile organic compounds

SO₂ = Sulfur dioxide

NO_x = Nitrogen oxides

CO = Carbon monoxide

Pb = Lead

Adsorber

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Type: Fluidized Bed Fixed Bed Moving Bed Disposable Concentrator Other _____

Adsorption Media: _____

For Fluidized Bed, Fixed Bed, Moving Bed and Disposable only:

Maximum design outlet organic compound concentration (ppmv): _____

Media replacement frequency or regeneration cycle time (specify units): _____

Maximum temperature of the media bed, after regeneration (including any cooling cycle): _____

For Concentrator Only:

Design regeneration cycle time (minutes): _____

Minimum desorption air stream temperature (°F): _____

Rotational rate (revolutions/hour): _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Catalytic Converter

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary Secondary Parallel

List all other air contaminant sources that are also vented to this control equipment: _____

List all egress point IDs (from Table 7-A) associated with this control equipment: _____

Catalytic Incinerator

Manufacturer: _____ Year installed: _____ Your ID for control equipment _____

Describe this control equipment:

Pollutant(s) controlled: PE/PM PE/PM₁₀ PE/PM_{2.5} OC VOC
 SO₂ NO_x CO Pb Other _____

Estimated capture efficiency (%): _____ Basis for efficiency: _____

Design control efficiency (%): _____ Basis for efficiency: _____

Operating control efficiency (%): _____ Basis for efficiency: _____

Combustion chamber residence time (seconds): _____

Minimum temperature difference (°F) across catalyst during air contaminant source operation: _____

Inlet gas flow rate (acfm): _____ Outlet gas flow rate (acfm): _____

Minimum inlet gas temperature (°F): _____ Outlet gas temperature (°F): _____

This is the only control equipment on this air contaminant source

Company Equipment ID: Fluorspar bagging operations

Wet Scrubber
Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:

Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:

Design control efficiency (%): Basis for efficiency:

Operating control efficiency (%): Basis for efficiency:

Operating pressure drop range (inches of water): Minimum: Maximum:

Type: Impingement, Packed bed, Spray chamber, Venturi, Other:

pH range for scrubbing liquid: Minimum: Maximum:

Is scrubber liquid recirculated? Yes No

Scrubber liquid flow rate (gal/min):

Scrubber liquid supply pressure (psig): NOTE: This item for spray chambers only.

Inlet gas flow rate (acfm): Outlet gas flow rate (acfm):

Inlet gas temperature (°F): Outlet gas temperature (°F):

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary, Secondary, Parallel

List all other air contaminant sources that are also vented to this control equipment:

List all egress point IDs (from Table 7-A) associated with this control equipment:

Other
Type: describe
Manufacturer: Year installed: Your ID for control equipment

Describe this control equipment:

Pollutant(s) controlled: PE/PM, PE/PM10, PE/PM2.5, OC, VOC, SO2, NOx, CO, Pb, Other

Estimated capture efficiency (%): Basis for efficiency:

Design control efficiency (%): Basis for efficiency:

Operating control efficiency (%): Basis for efficiency:

This is the only control equipment on this air contaminant source

If not, this control equipment is: Primary, Secondary, Parallel

List all other air contaminant sources that are also vented to this control equipment:

List all egress point IDs (from Table 7-A) associated with this control equipment:

6. Process Flow Diagram - Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

7. Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required.) An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.

Complete Tables 7-A and 7-C for stack emissions egress points and/or Table 7-B and 7-C for fugitive emissions egress points below if the requested allowable annual emission rate for this PTI or PTIO exceeds any of the following:

- Particulate Emissions (PE/PM10): 10 tons per year
Sulfur Dioxide (SO2): 25 tons per year
Nitrogen Oxides (NOx): 25 tons per year
Carbon Monoxide (CO): 100 tons per year
Lead (Pb): 0.6 ton per year
Toxic Air Contaminants: 1 ton per year. Toxic air contaminants are identified in OAC rule 3745-114-01.

Company Equipment ID: Fluorspar bagging operations

8. Request for Enforceable Restrictions - As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting state-only enforceable limits or state and federally enforceable limits to obtain synthetic minor status)?

- yes
no
not sure - please contact me to discuss whether this affects the facility.

If yes, why are you requesting enforceable restrictions? Check all that apply.

- a. to avoid being a major Title V source
b. to avoid being a major MACT source
c. to avoid being a major stationary source
d. to avoid being a major modification
e. to avoid an air dispersion modeling requirement
f. to avoid BAT requirements
g. to avoid another requirement. Describe:

If you checked a., b. or c., please attach a facility-wide potential to emit (PTE) analysis... If you checked d., please attach a net emission change analysis... If you checked e., f. or g., please attach a description of the restrictions proposed and how compliance with those restrictions will be verified.

9. Continuous Emissions Monitoring - Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.

- yes
no

If yes, complete the following information.

Company Name or ID for the Egress Point

CEM Description

This CEM monitors (check all that apply):

Opacity Flow CO NOx SO2 THC HCl HF H2S TRS CO2 O2 PM

10. EAC Forms - The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source unless a general permit is being requested. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form corresponds to this air contaminant source.

EAC 3113

EMISSIONS ACTIVITY CATEGORY FORM MATERIAL HANDLING: FUGITIVE DUST EMISSIONS

This form is to be completed for any material handling operation with fugitive dust emissions. State/Federal regulations which may apply to material handling operations are listed in the instructions. Note that there may be other regulations which apply to this emissions unit which are not included in this list.

1. Reason this form is being submitted (Check one)

New Permit Renewal or Modification of Air Permit Number(s) (e.g. F001)_P004_____

2. Maximum Operating Schedule: 24 hours per day; 312 days per year

If the schedule is less than 24 hours/day or 365 days/year, what limits the schedule to less than maximum? See instructions for examples. Off on Sundays

3. What is the material being handled? Calcium Fluorspar

4. Mean wind speed at or near facility 10.8 miles per hour

5. Complete the following table for all unloading operations.

ID	Type of Unloading (see examples below)	Material Unloaded	Annual Quantity Unloaded (tons/yr)	Hourly Maximum Unloading Rate (tons/hr)	Avg. Moisture Content, as Unloaded (%)
A	Truck: <input type="checkbox"/> dump <input type="checkbox"/> pneumatic Vessel: <input type="checkbox"/> clamshell <input type="checkbox"/> bucket ladder Rail car: <input type="checkbox"/> side dump <input type="checkbox"/> bottom dump <input type="checkbox"/> rotary dump <input type="checkbox"/> pneumatic Other: _____	N/A			
B	Truck: <input type="checkbox"/> dump <input type="checkbox"/> pneumatic Vessel: <input type="checkbox"/> clamshell <input type="checkbox"/> bucket ladder Rail car: <input type="checkbox"/> side dump <input type="checkbox"/> bottom dump <input type="checkbox"/> rotary dump <input type="checkbox"/> pneumatic Other: _____				
C	Truck: <input type="checkbox"/> dump <input type="checkbox"/> pneumatic Vessel: <input type="checkbox"/> clamshell <input type="checkbox"/> bucket ladder Rail car: <input type="checkbox"/> side dump <input type="checkbox"/> bottom dump <input type="checkbox"/> rotary dump <input type="checkbox"/> pneumatic Other: _____				

D	Truck: <input type="checkbox"/> dump <input type="checkbox"/> pneumatic Vessel: <input type="checkbox"/> clamshell <input type="checkbox"/> bucket ladder Rail car: <input type="checkbox"/> side dump <input type="checkbox"/> bottom dump <input type="checkbox"/> rotary dump <input type="checkbox"/> pneumatic Other: _____				
---	--	--	--	--	--

6. Complete the following table for all loading operations.

ID	Type of Loading (see examples below)	Material Loaded	Annual Quantity Loaded (tons/yr)	Hourly Maximum Loading Rate (tons/hr)	Avg. Moisture Content, as Loaded (%)
E	<input type="checkbox"/> front end loader <input type="checkbox"/> under pile load out <input type="checkbox"/> bucket well reclaimer <input type="checkbox"/> rake reclaimer <input checked="" type="checkbox"/> other: 3000 lb/bagger supersacks _____	Fluorspar	25 - 35 m	25 -27 tph	< 0.1%
F	<input type="checkbox"/> front end loader <input type="checkbox"/> under pile load out <input type="checkbox"/> bucket well reclaimer <input type="checkbox"/> rake reclaimer <input checked="" type="checkbox"/> other: 50 lb paper bag loading _____	Fluorspar	20 -25 m	25 -27 tph	< 0.1%
G	<input type="checkbox"/> front end loader <input type="checkbox"/> under pile load out <input type="checkbox"/> bucket well reclaimer <input type="checkbox"/> rake reclaimer <input type="checkbox"/> other: _____				
H	<input type="checkbox"/> front end loader <input type="checkbox"/> under pile load out <input type="checkbox"/> bucket well reclaimer <input type="checkbox"/> rake reclaimer <input type="checkbox"/> other: _____				

7. Complete the following table for all transfer operations.

ID	Type of Transfer Point (see examples below)	Number of Such Points	Type of Material Handled	Max. Transfer Rate (tons/hr)
I	<input type="checkbox"/> Load/unload conveyor: <input type="checkbox"/> vibrating <input type="checkbox"/> belt <input checked="" type="checkbox"/> screw <input type="checkbox"/> bucket elevator <input type="checkbox"/> belt conveyor to belt conveyor Other: <u>Supersacks</u>	2	Fluorspar	27 tph
J	<input type="checkbox"/> Load/unload conveyor: <input type="checkbox"/> vibrating <input type="checkbox"/> belt <input checked="" type="checkbox"/> screw <input type="checkbox"/> bucket elevator <input type="checkbox"/> belt conveyor to belt conveyor Other: <u>50 lb paper bagger</u>	1	Fluorspar	27 tph
K	<input type="checkbox"/> Load/unload conveyor: <input type="checkbox"/> vibrating <input type="checkbox"/> belt <input type="checkbox"/> screw <input type="checkbox"/> bucket elevator <input type="checkbox"/> belt conveyor to belt conveyor Other: _____			
L	<input type="checkbox"/> Load/unload conveyor: <input type="checkbox"/> vibrating <input type="checkbox"/> belt <input type="checkbox"/> screw <input type="checkbox"/> bucket elevator <input type="checkbox"/> belt conveyor to belt conveyor Other: _____			
M	<input type="checkbox"/> Load/unload conveyor: <input type="checkbox"/> vibrating <input type="checkbox"/> belt <input type="checkbox"/> screw <input type="checkbox"/> bucket elevator <input type="checkbox"/> belt conveyor to belt conveyor Other: _____			
N	<input type="checkbox"/> Load/unload conveyor: <input type="checkbox"/> vibrating <input type="checkbox"/> belt <input type="checkbox"/> screw <input type="checkbox"/> bucket elevator <input type="checkbox"/> belt conveyor to belt conveyor Other: _____			
O	<input type="checkbox"/> Load/unload conveyor: <input type="checkbox"/> vibrating <input type="checkbox"/> belt <input type="checkbox"/> screw <input type="checkbox"/> bucket elevator <input type="checkbox"/> belt conveyor to belt conveyor Other: _____			

8. Summarize the material handling operations covered in items 5 through 7 above and identify the applicable control method(s) from available options. Complete the remaining table based upon the selected control method(s).

ID	Enclosure, Control Equipment (describe)	Chemical Stabilization	Application Frequency	Overall Control Eff. (%)	Basis for Overall Control Efficiency
A		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
B		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
C		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
D		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
E		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
F		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
G		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
H		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
I		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
J		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
K		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			

L		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
M		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
N		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			
O		<input type="checkbox"/> water <input type="checkbox"/> dust suppressant <input type="checkbox"/> other: _____			

Model General Permit (MGP) Qualifying Criteria Document

Source Description: Storage piles, including load-in, load-out and wind erosion activities for facilities with a maximum production of 3,000,000 tons/year and a maximum storage pile surface are of 6 acres

MGP Number: GP7.2

Qualifying Criteria:

Answer the following questions by checking the appropriate box for the choice that describes the equipment for which you are applying for a permit. Then review the qualifying criteria described after the list.

- Yes No 1. Does this facility have raw material storage pile areas?
- Yes No 2. Has the owner or operator identified in their application a lowest moisture content (uncontrolled state), by weight, of the material in the storage piles greater than or equal to 1.0%?
- See Reference AP-42, Section 13.2.4-1 for facility specific information. A facility may submit moisture test (before application of any dust suppressants) results with the permit application to the permit agency. The appropriate Ohio EPA District Office or local air agency will determine whether to accept the test results as representative of the site.
- Yes No 3. Is the maximum surface area for storage piles at the facility equal to or less than 6 acres?
- Yes No 4. Is the maximum throughput of material at the facility less than 3,000,000 tons per year?
- Yes No 5. Does the owner or operator agree the emissions units covered by this general permit can remain in compliance with all terms and conditions of the general permit, including the requirements to employ best available control measures?
- Yes No 6. Does the owner or operator agree to submit a labeled diagram of the storage piles at the facility with the application for a general permit?
- Yes No 7. Is the facility a landfill site?
- Yes No 8. Does the facility engage in the working of coal storage piles by vehicles on top of the piles?

Model General Permit (MGP) Qualifying Criteria Document

- Yes No
9. Is the air contaminant source(s) for which this general permit is being sought a part of a new major stationary source or a major modification (see OAC rule 3745-31-01)? If you are unsure, check with the appropriate Ohio EPA District Office or local air agency.

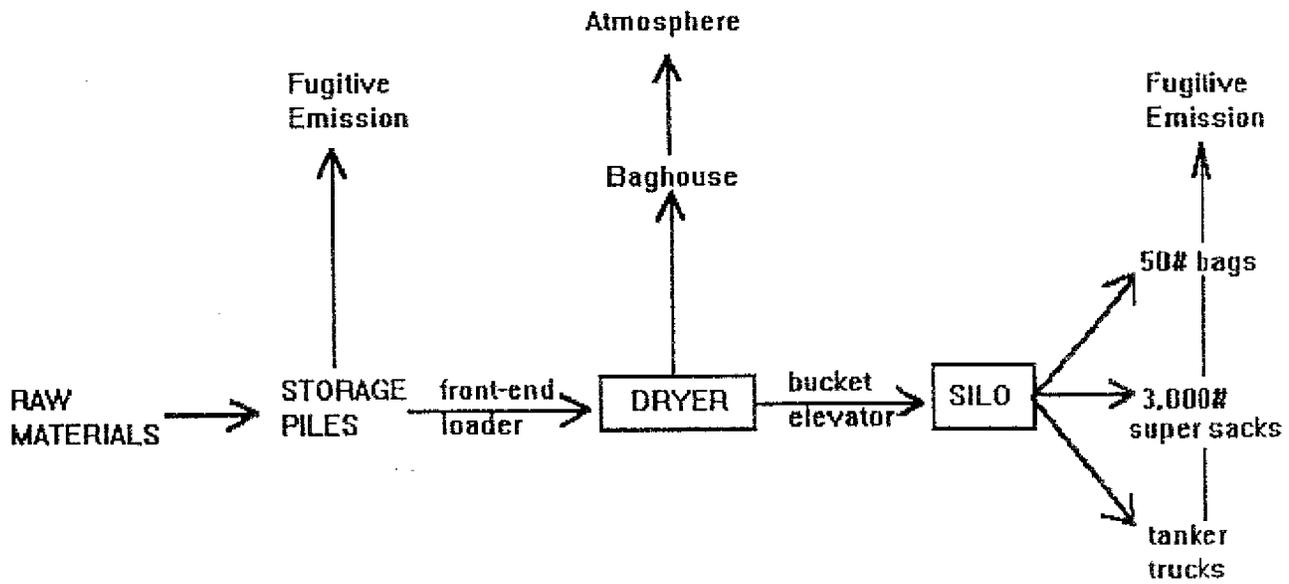
If the answers to questions 1 through 7 are yes, and 8 and 9 are no, the facility meets the above "Qualifying Criteria." Otherwise, the facility is not eligible for a general permit and will, instead, need a standard, or traditional, permit. By signing below, the owner or operator's signature shall constitute personal affirmation that the applicant meets the qualifying criteria contained above, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

Authorized Signature (for facility)

Date

Title

[Handwritten Signature]
8/19/2009
PRESIDENT



GREAT LAKES FLUORSPAR
2470 CANAL ROAD
CLEVELAND, OHIO 44113

SCC	Process Name	PART Lbs/Unit	PM10 Lbs/Unit	SOx Lbs/Unit	NOx Lbs/Unit	VOC Lbs/Unit	CO Lbs/Unit	LEAD Lbs/Unit	UNITS	NOTES
<u>Magnesium Carbonate - 1459</u>										
3-05-024-99	Other Not Classified	XXX	XXX	XXX	XXX	XXX	XXX	XXX	Tons Processed	
<u>Sand/Gravel - 1442, 1446</u>										
3-05-025-02	Aggregate Storage	0.33	0.12	0.0	0.0	0.0	0.0	---	Tons Product	
3-05-025-03	Material Transfer and Conveying	0.029	0.0064	0.0	0.0	0.0	0.0	---	Tons Product	
3-05-025-04	Hauling	52.0	---	0.0	0.0	0.0	0.0	---	Vehicle-Miles	
3-05-025-05	Pile Forming; Stocker	0.13	0.06	0.0	0.0	0.0	0.0	---	Tons Product	
3-05-025-06	Bulk Loading	0.02	0.0024	0.0	0.0	0.0	0.0	---	Tons Product	
3-05-025-07	Storage Piles	3796.0	1367.0	0.0	0.0	0.0	0.0	---	Acres of Storage Area	
3-05-025-08	Dryer	---	---	0.002	1.6	0.004	---	---	Tons Product	
3-05-025-09	Cooler	---	---	0.0	0.0	0.0	---	---	Tons Product	
3-05-025-10	Crushing	---	---	0.0	0.0	0.0	---	---	Tons Product	
3-05-025-11	Screening	---	0.12	0.0	0.0	0.0	---	---	Tons Product	
<u>Diatomaceous Earth - 1499, 3295</u>										
3-05-026-01	Handling	---	---	0.0	0.0	0.0	0.0	---	Tons Product	
3-05-026-99	Other Not Classified	XXX	XXX	XXX	XXX	XXX	XXX	XXX	Tons Processed	
<u>Ceramic Electric Parts - 3264</u>										
3-05-030-99	Other Not Classified	XXX	XXX	XXX	XXX	XXX	XXX	XXX	Tons Processed	
<u>Asbestos Mining - 1499</u>										
3-05-031-01	Surface Blasting	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	
3-05-031-02	Surface Drilling	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	
3-05-031-03	Cobbing	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	
3-05-031-04	Loading	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	
3-05-031-05	Convey/Haul Asbestos	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	
3-05-031-06	Convey/Haul Waste	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	
3-05-031-07	Unloading	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	
3-05-031-08	Overburden Stripping	---	---	0.0	0.0	0.0	0.0	---	Tons Removed	
3-05-031-09	Ventilation of Process Operations	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	
3-05-031-10	Stockpiling	---	---	0.0	0.0	0.0	0.0	---	Tons of Ore	

SCC	Process Name	PART Lbs/Unit	PM10 Lbs/Unit	SOx Lbs/Unit	NOx Lbs/Unit	VOC Lbs/Unit	CO Lbs/Unit	LEAD Lbs/Unit	UNITS	NOTES
<u>Lignite - 1000-3999</u>										
1-02-003-01	Pulverized Coal	6.3 A	2.18 A	30.0 S	14.0	0.07	0.6	0.0133	Tons Burned	
1-02-003-02	Pulverized Coal: Tangential Firing	6.3 A	2.18 A	30.0 S	8.0	0.07	0.6	0.0133	Tons Burned	
1-02-003-03	Cyclone Furnace	6.7 A	0.87 A	30.0 S	17.0	0.07	0.6	0.0133	Tons Burned	
1-02-003-04	Traveling Grate (Overfeed) Stoker	2.9 A	1.07 A	30.0 S	6.0	0.07	6.0	0.0133	Tons Burned	
1-02-003-06	Spreader Stoker	6.8 A	1.36 A	30.0 S	6.0	0.07	5.0	0.0133	Tons Burned	
1-02-003-07	Cogeneration	6.3 A	2.18 A	30.0 S	8.0	0.07	0.6	---	Tons Burned	
<u>Residual Oil - 1000-3999</u>										
1-02-004-01	Grade 6 Oil	12.0 S, (b)	10.8 S	158.6 S	55.0	0.28	5.0	0.0042	1000 Gallons Burned	
1-02-004-04	Grade 5 Oil	10.0 (b)	9.0	158.6 S	55.0	0.28	5.0	0.0042	1000 Gallons Burned	
1-02-004-05	Cogeneration	12.0 S	10.8 S	158.6 S	55.0	0.28	5.0	---	1000 Gallons Burned	
<u>Distillate Oil - 1000-3999</u>										
1-02-005-01	Grades 1 and 2 Oil	2.0	1.0	143.6 S	20.0	0.2	5.0	0.0004	1000 Gallons Burned	
1-02-005-04	Grade 4 Oil	7.0	6.3	150.0 S, (c)	20.0	0.2	5.0	0.0004	1000 Gallons Burned	
1-02-005-05	Cogeneration	2.0	1.0	143.6 S	20.0	0.2	5.0	---	1000 Gallons Burned	
<u>Natural Gas - 1000-3999</u>										
1-02-006-01	Over 100 MBtu/Hr	3.0	3.0	0.6	550.0	1.4	40.0	---	Million Cubic Feet Burned	
1-02-006-02	10-100 MBtu/Hr	3.0	3.0	0.6	140.0	2.8	35.0	---	Million Cubic Feet Burned	
1-02-006-03	Less Than 10 MBtu/Hr	3.0	3.0	0.6	100.0	5.3	20.0	---	Million Cubic Feet Burned	
1-02-006-04	Cogeneration	3.0	3.0	0.6	275.0	1.4	40.0	---	Million Cubic Feet Burned	
<u>Process Gas - 1000-3999 (c)</u>										
1-02-007-01	Petroleum Refinery Gas	3.0	3.0	950.0 S	140.0	2.8	35.0	---	Million Cubic Feet Burned	
1-02-007-04	Blast Furnace Gas	2.9	2.9	950.0 S	23.0	0.0 (c)	13.7 (c)	---	Million Cubic Feet Burned	
1-02-007-07	Coke Oven Gas	6.2	4.35	680.0 S	80.0	1.2 (c)	18.4 (c)	---	Million Cubic Feet	

23

MAG - Res. Tech

Computer

NOx:
140
x 271.56

38,018 lbs
19,027 lbs

CO:
35
x 271.56

4504.6 lbs
4,7513
TL

Calculations of Emissions for Great Lakes Fluorspar

1.0 P001 - Natural Gas Fired Drier Kiln with Bag House

Under SCC 1-02-006-02 "Natural gas fired process heaters (kiln), we see for units burning at 10 to 100 mm BTU's/hr.

	<u>PM</u>	<u>NOX</u>	<u>CO</u>
Emission factors	3.0 lbs/mm	140.0 lbs/mm	35 lbs/mm

The burner at Great Lakes Fluorspar is rated at 31.8 mm BTU's/hr.

Assuming 1000 BTU's/cu. ft. NG burnt

$$31.8 \text{ mm BTU's/hr} \times \frac{1.0 \text{ cu. ft.}}{1000 \text{ BTU's}} = 31.8 \text{ m cu. ft/hr.}$$

$$31.8 \text{ cu. ft/hr} \times 8760 \text{ hrs.} = 271.56 \text{ mm cu. ft/year}$$

MPTE

Emission from NG - Combustion

PM: $271.56 \text{ mm cu. ft/year} \times 3.0 \text{ lbs/mm} = 814.7 \text{ lbs/year}$ [deminimis]

NOX: $271.56 \text{ mm cu. ft/year} \times 140 \text{ lbs/mm} = 28,018 \text{ lbs/year}$
 $= 19.001 \text{ tpy}$

CO: $271.56 \text{ mm cu. ft/year} \times 35 \text{ lbs/mm} = 9504.6 \text{ lbs.}$
 $= 4.752 \text{ tpy}$

Emissions from Bag House

$$12,500 \text{ SCFM} \times 0.02 \text{ grains*/cu. ft.} \times \frac{1 \text{ lb.}}{7000 \text{ grains}} = 0.03571 \text{ lb/min}$$

*manufacturer's specs

$$0.03571 \text{ lbs/min} \times 60 \text{ min/hr} \times 8760 \text{ hrs/year} = 18,771 \text{ lbs/yr.}$$
$$= 9.385 \text{ tpy PM-10}$$

2.0 P002 & P003 Both Covered by General Permit 7.2 { Storage piles, in and out loading, wind losses }

Per GP 7.2 "less than 3.0 mm tons per year thruput (70,000 tpy estimate at Great Lakes Fluorspar) and less than 6.0 acres in storage piles (GLF less than 2.0 acres)

GP 7.2 >> PM - 6.4 tpy - allowed
PM-10 - 3.1 tpy - allowed

3.0 P004 - Bagging Operation

Because of limitations of the BTU rating of the drier kiln, the MPTE for GLF is approximately 70,000 tpy.

The bulk loading system - silo into a bulk truck

SCC 3-05-025-06 "Bulk loading"
Emission Factor: 0.02 lbs/ton loaded

$70,000 \text{ tons per year} \times 0.02 \text{ lbs/ton} = 1400 \text{ lbs/year [deminimis]}$

3,000 lbs. super sack loader & screw conveyor

SCC 3-05-025-03 "Material transfer & conveying"
Emission Factor: 0.029 lbs/ton

$42,000 \text{ tons year (60\% of 70,000)} \times 0.029 \text{ lbs/tons}$
 $= 1218 \text{ lbs/year[deminimis]}$

50 lb. paper bagger

SCC 3-05-025-03 "Material transfer & conveying"
Emission Factor: 0.029 lbs/ton

$28,000 \text{ tons/year (40\% of 70 m)} \times 0.029 \text{ lbs/ton}$
 $= 812 \text{ lbs/year[deminimis]}$

4.0 Actual Emissions

Historically, GLF has never dried more than 40,000 tons/year and most years are below 30,000 tpy.

Actual emissions are more than covered by the emissions capacity standard stated in the original PTO issued on 3/10/98.

GLF INTERNATIONAL, INC.

09808

Account #: 4280-01

Description

Ck. Date: 08/19/09

Facility ID 13-18-00-0379

2007 - 2008 Violations

Ck. No: 9808

Treasurer, City of Cleveland

Ck. Total: \$225.00



DOCUMENT IS PRINTED ON CHEMICALLY REACTIVE PAPER. THE BACK OF THIS DOCUMENT INCLUDES A TAMPER EVIDENT CHEMICAL WASH WARNING BOX.

GLF International, Inc.
3690 ORANGE PLACE, SUITE 470
CLEVELAND, OHIO 44122

KEYBANK NATIONAL ASSOCIATION
CLEVELAND, OHIO
6-103
410

09808

DATE AMOUNT
08/19/09 \$225.00

PAY TWO HUNDRED TWENTY FIVE ----- DOLLARS

TO THE ORDER OF
Treasurer, City of Cleveland
City Permit Division, Cleveland Air Quality
75 Erieview Plaza 2nd Floor
Cleveland, Ohio 44114-1839

[Handwritten Signature]
AUTHORIZED SIGNATURE



⑈009808⑈ ⑆041001039⑆01096⑈5650⑈

THE BACK OF THIS DOCUMENT INCLUDES TAMPER EVIDENT PAPER

ORIGINAL DOCUMENT HAS BEEN KEYBANK.COM THAT APPEARS WITH THIS



City of Cleveland

Frank G. Jackson, Mayor

Department of Public Health
 Division of Air Quality
 75 Erieview Plaza, 2nd Floor
 Cleveland, Ohio 44114-1839

FINAL NOTICE

December 15, 2009

2007 City of Cleveland Air Contaminant Source Invoice

Great Lakes Fluorspar

Facility ID:

13-18-00-0379

Facility Location:

2470 Canal Road

Cleveland

Ohio

44113

Source	Air Contaminant Source Name and Description	Fee
P001	Indirect Gas-Fired Fluorspar Rotary Drying Kiln - 31.07 MMBtu/hr	\$75.00
P002	Loading/Handling Operations	\$12.50
P003	Storage Piles	\$12.50
P004	Bagging operations	\$12.50

Total Fee for Facility:**\$112.50****Amount Paid:**

13-18-00-0379

By signing this form, I affirm, based on information and belief formed after reasonable inquiry, that all factual statements in this report are true and complete to the best of my knowledge, and that all judgments and estimates provided in this report have been made in good faith. I further affirm that this listing comprises a complete listing of all air contaminant sources at this facility, or that I have enclosed permit application forms addressing all air contaminant sources not listed. I understand that the data provided in this document is used by the City of Cleveland to calculate a fee, which my facility is required to pay under Chapter 263 of the City of Cleveland Health Code.

Signature of Responsible Official: _____

\$112.50

Amount Remitted

JAMES A. McCLURE

PRESIDENT

216-622-6901

Name (please print)

Title (please print)

Phone Number (please print)

Please return this Air Contaminant Source Invoice bearing an original signature as well as any additional permit applications along with the Total Fee for Facility shown above to:

City Permits Section
 Division of Air Quality
 75 Erieview Plaza, 2nd Floor
 Cleveland, OH 44114 -
 1839

Payment must be received by:
January 31, 2009

Funds must be made
 payable to:
 Treasurer, City of
 Cleveland.

THANK YOU!



City of Cleveland

Frank G. Jackson, Mayor

Department of Public Health

Division of Air Quality

75 Erievue Plaza, 2nd Floor

Cleveland, Ohio 44114-1839

SECOND NOTICE

January 1, 2009

2008 City of Cleveland Air Contaminant Source Invoice

Great Lakes Fluorspar

Facility ID:

13-18-00-0379

Facility Location:

2470 Canal Road

Cleveland

Ohio

44113

Source	Air Contaminant Source Name and Description	Fee
P001	Indirect Gas-Fired Fluorspar Rotary Drying Kiln - 31.07 MMBtu/hr	\$75.00
P002	Loading/Handling Operations	\$12.50
P003	Storage Piles	\$12.50
P004	Bagging operations	\$12.50

Total Fee for Facility:**\$112.50****Amount Paid:**

13-18-00-0379

By signing this form, I affirm, based on information and belief formed after reasonable inquiry, that all factual statements in this report are true and complete to the best of my knowledge, and that all judgments and estimates provided in this report have been made in good faith. I further affirm that this listing comprises a complete listing of all air contaminant sources at this facility, or that I have enclosed permit application forms addressing all air contaminant sources not listed. I understand that the data provided in this document is used by the City of Cleveland to calculate a fee, which my facility is required to pay under Chapter 263 of the City of Cleveland Health Code.

Signature of Responsible Official:

\$112.50

Amount Paid

JAMES A. McCLURG

PRESIDENT

216-621-6901

Name (please print)

Title (please print)

Phone Number (please print)

Please return this Air Contaminant Source Invoice bearing an original signature as well as any additional permit applications along with the Total Fee for Facility shown above to:

City Permits Section
Division of Air Quality
75 Erievue Plaza, 2nd Floor
Cleveland, OH 44114 -
1839

Payment must be received by:
January 31, 2009

Funds must be made
payable to:
Treasurer, City of
Cleveland.

THANK YOU!