

2 of 11 Pages

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations.

3 of 11 Pages

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after

4 of 11 Pages

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

Facility Name: **George J Igel & Company Inc**Application Number: **01-7319**Date: **September 10, 1998**AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **George J Igel & Company Inc** located in **Franklin** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P901	100 ton/hr Portable Crusher w/Screen	Compliance with 3745-17-08, use of water spray, and operating restriction*	3745-31-05 3745-17-08	0.9 lb particulate/hr, 0.9 ton particulate/yr, and see Additional Special Terms and Conditions.
F001	Material Handling w/five Transfer Points	Compliance with 3745-17-08, use of water, and operating restriction*	3745-31-05 3745-17-08	0.7 lb particulate/hr, 0.7 ton particulate/yr, and see Additional Special Terms and Conditions.
F002	Unpaved and Paved Roadways and Parking Areas	Compliance with 3745-17-08, use of water, and operating restriction*	3745-31-05 3745-17-08	16.5 tons particulate/yr and see Additional Special Terms and Conditions.
F003	Crushed Concrete Storage Piles	Compliance with 3745-17-08, use of water, and operating restriction*	3745-31-05 3745-17-08	0.9 ton particulate/yr and see Additional Special Terms and Conditions.

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

- * This facility is limited to 2,000 hours of operation per year.

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulate matter	19.0

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA Central District Office, 3232 Alum Creek Drive, Columbus, Ohio 43207-3417.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA Central District Office, 3232 Alum Creek Drive, Columbus, Ohio 43207-3417.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

7 of 11 Pages

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Operational Restrictions

1. The maximum annual operating hours for the crusher shall not exceed 2,000 hrs, based upon a rolling, 12 month summation of the operating hours.
2. The permittee shall employ a water spray on the crusher at a minimum flow rate of 3.5 gallons per ton of concrete crushed.
3. The permittee shall apply dust suppressants to the unpaved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. Watering shall be used as the dust suppressant, and the following equipment shall be used for the periodic applications: water truck. The dust suppressant shall be applied to the paved and unpaved surfaces, at a minimum, every day. This term and condition shall be waived during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.

Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.

A maximum speed limit of 10 miles per hour shall be posted and enforced on the property.

Open bodied vehicles transporting materials likely to become airborne shall be covered at all times.

4. Visible particulate emissions from the crusher, screens or conveyors shall not exceed 10% opacity except for a period of time not to exceed 6-minutes during any sixty-minute observation period.

8 of 11 Pages

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

5. There shall be no visible particulate emissions from roadways and parking areas except for a period of time not to exceed 3-minutes during any sixty-minute observation period.
6. There shall be no visible particulate emission from the material storage piles except for a period of time not to exceed 1-minute during any sixty-minute observation period.

B. Monitoring and Recordkeeping Requirements

1. The permittee shall maintain records which include the following information for the unpaved roadways and parking areas:
 - a. the date dust suppressants were applied to the unpaved surfaces;
 - b. the portions of unpaved surfaces that were treated with dust suppressants;
 - c. the application rate of water and any chemical additives (gallons of each per square yard); and,
 - d. the name of the equipment operator responsible for the application of the dust suppressants.
2. Each record of any monitoring data and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to daily usage records required by the permit. Such records may be maintained in computerized form

C. Reporting requirements

1. The permittee shall submit proper notice of intent to relocate the portable plant within a minimum of thirty days prior to the scheduled relocation to the Ohio EPA

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

Central District Office. Upon receipt of this notice, the Director's authorized representative will evaluate the request in accordance with the following:

- a. the source is equipped with Best Available Control Technology for this source;
- b. the source is operating pursuant to the currently effective permit; and
- c. in the Director's judgement, the proposed site is acceptable under OAC rule 3745-15-07

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the source may result in fines and civil penalties.

D. Testing requirements

1. Compliance with the emission limitation(s) shall be determined in accordance with the following method(s):

- a. Emission Limitation: P901 Crusher

0.9 lbs particulate/hr; 0.9 ton particulate/yr

Applicable Compliance Method:

The following equation calculates the hourly emission rate: SCC 3-05-020-01/03
 $0.0007 \text{ lb PM/ton crushed} + 0.0084 \text{ lb PM/ton screened} = 0.0091 \text{ lb/ton}$
 $0.0091 \text{ lb/ton (emission factor)} * 100 \text{ tons/hr} = 0.91 \text{ lb PM/hr}$

The following equation calculates the annual emission rate:
 $0.91 \text{ lb PM/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 0.91 \text{ ton/yr}$

- b. Emission Limitation: F001 Material Handling

0.7 lbs PM/hr; 0.7 tons PM/yr;

10 of 11 Pages

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

Applicable Compliance Method:

The following equation calculates the hourly emission rate: SCC 3-05-020-06
 $0.00014 \text{ lb PM/ton transferred} * 5 \text{ points} = 0.007 \text{ lbs PM/ton}$
 $0.007 \text{ lbs PM/ton (emission factor)} * 100 \text{ tons/hr} = 0.7 \text{ lbs PM/hr}$

The following equation calculates the annual emission rate:
 $0.7 \text{ lb PM/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 0.7 \text{ ton PM/yr}$

c. Emission Limitation: F002 Roadways

16.5 tons PM/yr

Applicable Compliance Method:

The following equation calculates the annual emission rate: AP-42 13.2.1-1

Paved access emission factor = $k * (sL/2)^{0.65} * (W/3)^{1.5}$
 $.EF = 0.082 * (12/2)^{0.65} * (28/3)^{1.5} = 4.5 \text{ lbs PM/VMT (paved)}$
 $4.5 \text{ lbs PM/VMT Dump Trucks} * 3,200 \text{ miles} * 1 \text{ ton}/2,000 \text{ lbs} = 7.2 \text{ tons PM/yr}$

Unpaved haul emission
factor = $k * 5.9 * (s/12) * (S/30) * (W/3) * 0.7 * (w/4) * 0.5 * (dry/365)$
 $EF = 0.8 * 5.9 * (10/12) * (10/30) * (28/3) * 0.7 * (14/4) * 0.5 * (229/365) = 9.3 \text{ lbPM/VMT unpaved}$
 $9.3 \text{ lbs PM/VMT Dump Trucks} * 1,600 \text{ miles} * 1 \text{ ton}/2,000 \text{ lbs} = 7.4 \text{ tons PM/yr}$

$EF = 0.8 * 5.9 * (10/12) * (5/30) * (32/3) * 0.7 * (4/4) * 0.5 * (229/365) = 1.5 \text{ lb PM/VMT unpaved}$
 $1.5 \text{ lbs PM/VMT End Loaders} * 2,500 \text{ miles} * 1 \text{ ton}/2,000 \text{ lbs} = 1.9 \text{ tons PM/yr}$

11 of 11 Pages

Facility Name: **George J Igel & Company Inc**

Application Number: **01-7319**

Date: **September 10, 1998**

d. Emission Limitation: F003 Storage Piles

0.88 tons PM/yr

Applicable Compliance Method:

The following equation calculates the annual emission rate: AP-42 , 5th ed.

Load-in to Storage Piles Emission Factor =
 $k * 0.0016 * (U/5) * 1.3 / (M/2) * 1.4$
 $EF = 0.74 * 0.0016 * (9/5) * 1.3 / (5/2) * 1.4 = 0.0015 \text{ lb}$
PM/ton load-in 0.0015 lb PM/ton * 400,000 tons
loaded/yr * 1 ton/2,000 lbs = 0.3 ton PM/yr

Wind Erosion Storage Piles Emission Factor =
 $0.05 * (s/1.5) * (D/90) * (d/235) * (f/15)$
 $EF = 0.05 * (0.5/1.5) * (30/90) * (229/235) * (15/15) = 0.0054 \text{ lb}$
PM/ton stored 4 pile * 2,500 tns * 0.0054 lb/ton *
12 mths/yr * 1 ton/2,000 lbs = 0.32 ton PM/yr

Load-out from Storage Piles Emission Factor =
 $k * 0.0016 * (U/5) * 1.3 / (M/2) * 1.4$
 $EF = 0.74 * 0.0016 * (9/5) * 1.3 / (3/2) * 1.4 = 0.0026 \text{ lb}$
PM/ton load-out 0.0026 lb PM/ton * 200,000 tons
loaded/yr * 1 ton/2,000 lbs = 0.26 ton PM/yr

E. Miscellaneous Requirements

1. None