



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
MEDINA COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 16-02449

Fac ID: 1652050190

DATE: 8/24/2006

FBC Chemical Corp
Lad Hudac
PO Box 599
Mars, PA 16046

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

ARAQMD



**Permit To Install
Terms and Conditions**

**Issue Date: 8/24/2006
Effective Date: 8/24/2006**

FINAL PERMIT TO INSTALL 16-02449

Application Number: 16-02449
Facility ID: 1652050190
Permit Fee: **\$2100**
Name of Facility: FBC Chemical Corp
Person to Contact: Lad Hudac
Address: PO Box 599
Mars, PA 16046

Location of proposed air contaminant source(s) [emissions unit(s)]:
**900 W Smith Rd
Medina, Ohio**

Description of proposed emissions unit(s):
Storage Tanks, Loading Rack, Container Filling.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing 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, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

FBC Chemical Corp
PTI Application: 16-02449
Issued: 8/24/2006

Facility ID: 1652050190

the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

9. Construction of New Sources(s)

FBC Chemical Corp
PTI Application: 16-02449
Issued: 8/24/2006

Facility ID: 1652050190

The proposed emissions unit(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 cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(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 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. 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 the requirements of this permit or cannot meet applicable standards.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. 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.

FBC Chemical Corp
 PTI Application: 16-02449
 Issued: 8/24/2006

Facility ID: 1652050190

13. Source Operation and Operating Permit Requirements 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, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
VOCs	9.2

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - Unpaved roadways and parking areas, with a maximum of 120,000 vehicle miles traveled per year	OAC rule 3745-31-05(A)(3)	7.4 tons/year of fugitive particulate matter of 10 microns or less (PM10)
		25.2 tons/year of fugitive particulate emissions (PE)
		no visible PE except for 3 minutes during any 60-minute period
	OAC rule 3745-17-07(B)(5) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See Sections A.2.a through A.2.f.)
	OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). (See Sections A.2.a through A.2.f.)

2. Additional Terms and Conditions

- 2.a** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the unpaved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.b** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for unpaved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.c** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.d** Any unpaved roadway or parking area that is subsequently paved, will require a General Permit for paved roadways and parking areas.
- 2.e** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

NONE

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all roads and parking areas	daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 3.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

Emissions Unit ID: F001

- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitations:

7.4 tons/year of fugitive PM10
25.2 tons/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used. These emission limits in the General Permit were based on a maximum of 120,000 vehicle miles traveled per year, and a 95 % control efficiency for PE and PM10.

- b. Emission Limitation:

No visible PE from unpaved roadways and parking areas except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

F. Miscellaneous Requirements

NONE

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-21-07(G)(2)
<p>J001 (Truck Loading Rack) loading tank trucks from storage tanks with organic liquids, 100 gallon/minute pumping rate capacity, vapor balance on T001 to reduce emissions of organic compounds (OCs) and volatile organic compounds (VOCs).</p>	<p>OAC rule 3745-31-05(A)(3)</p>	
<p>This facility consists of: F001 (Roadway/Parking Area), J001 (Truck Loading Rack), J002 (Drum Loading Rack), T001 (Storage Tank T-18), & nineteen (19) OAC rule 3745-31-03 permit-exempt storage tanks: T-1A, T1-B, T-2, T-3, T-4, T-5, T-6, T-7, T-8, T-9, T-10, T-11, T-12, T-13, T-14, T-15, T-16, T-17, & T-19.</p>	<p>OAC rule 3745-21-07(B)</p>	<p>OAC rule 3745-31-05(C) (to avoid moderate nonattainment program requirements);</p>

Applicable Emissions
Limitations/Control Measures

VOC emissions from this emissions unit shall not exceed:

3.665 pounds per 1000 gallons of liquid chemicals loaded; and

1.3 tons per year, based upon the throughput restrictions of B.3 below.

The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-07(B), OAC rule 3745-21-07(G)(2), OAC rule 3745-31-05(C), and OAC rule 3745-35-07(B).

The permittee satisfies the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

On any day when PRMs, as defined by OAC rule 3745-21-01(C)(5), are used, the following emission limits shall apply:

8 pounds of OCs per hour; and

40 pounds of OCs per day.

Emissions from all organic liquids used, not only from PRMs, shall be counted in the total OC emissions.

VOC emissions from this facility shall not exceed 9.2 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Also see A.2b and A.2.c

2. Additional Terms and Conditions

2.a Before any proposed change(s), such as with chemicals pumped, physical construction or design of the loading rack, etc., or any other change(s) that increase(s) the potential to emit, the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

2.b The following is an inclusive list of chemicals used at the facility:

Mineral Spirits (Stoddard Solvent);
VM&P Naphtha;
Toluene;
Methyl Ethyl Ketone (MEK);
Xylene;
Ethyl Alcohol (Ethanol);
Isopropyl Alcohol (IPA);
Calumet 420-460;
Calumet 4257;
Calumet 200-230;
Calumet 208; and
Shellsol B HT.

Except for toluene and xylene, none of the above listed chemicals are photochemically reactive materials (PRMs), as defined by OAC rule 3745-21-01(C)(5).

2.c In order to maintain this facility as a minor source of VOCs and hazardous air pollutants (HAPs), thus avoiding New Source Review moderate nonattainment program requirements, the permittee requested federally enforceable chemical throughput restrictions to limit the potential to emit below major source emission thresholds.

B. Operational Restrictions

1. No mixing or blending of chemicals shall be performed at this facility.
2. The permittee shall not employ any volatile photochemically reactive material, as defined by OAC rule 3745-21-01(C)(7), in this emissions unit.

3. The permittee shall restrict the annual throughput of each chemical of the truck loading rack, while loading tank trucks, as specified in the table below under "Maximum Allowable Annual Throughput". The truck loading rack throughput restrictions are a part of the facility's synthetic minor strategy to limit the potential to emit (PTE) below major source thresholds.

Chemical*	Vapor Pressure (psia @ 71.9 F)	Truck Loading Rack Maximum Allowable Annual Throughput (gallons/year)**
Stoddard Solvent	0.02	20,000
VM&P Naphtha	0.32	20,000
Toluene	0.503	125,000
MEK	1.5	75,000
Xylene	0.209	45,000
Ethanol	0.967	45,000
IPA	0.724	320,000
Calumet 420-460	0.002	740,000
Calumet 4257	1.95	320,000
Calumet 200-230	0.95	125,000
Calumet 208	1.25	320,000
Shellsol B HT	2.9	320,000

*Except for toluene and xylene, none of the above listed chemicals are photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(5).

**Each annual throughput restriction is based upon a rolling, 12-month summation of the monthly throughput..

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each day photochemically reactive materials are loaded in the emissions unit:
 - a. the company identification of each organic liquid loaded;
 - b. the number of gallons of each organic liquid loaded;
 - c. the OC content (density) of each organic liquid loaded;

- d. the total OC emissions from all organic liquids loaded, in pounds of OCs/day, i.e., the sum of [b x c], respectively, for all organic liquids loaded.
 - e. the hours the emissions unit was in operation;
 - f. the average hourly OC emissions, in pounds of OCs/hour, i.e., $f = d/e$;
 - g. whether or not each organic liquid loaded is a volatile photochemically reactive material, as defined by OAC rule 3745-21-01(C)(7); and
 - h. the total quantity loaded, in gallons, of all volatile photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(7).
2. For the truck loading rack, the permittee shall maintain monthly records of the following information:
 - a. the monthly throughput for each chemical loaded;
 - b. the rolling, 12-month summation of the monthly throughput for each chemical loaded;
 - c. the monthly total VOC emissions for all chemicals loaded; and
 - d. the rolling, 12-month summation of the monthly total VOC emissions for all chemicals loaded.
 3. For the facility, the permittee shall maintain monthly records of the following information:
 - a. the monthly total facility VOC emissions from all chemicals used at the facility, i.e., all storage tanks, the truck loading rack, and the drum loading rack; and
 - b. the rolling, 12-month summation of the monthly total VOC emissions from the facility, i.e., all storage tanks, the truck loading rack, and the drum loading rack.

D. Reporting Requirements

1. In accordance with the General Terms and Conditions of this permit, the permittee shall submit deviation (excursion) reports which include the following information:

- a. identification of each day when photochemically reactive materials were used during which the OC emissions from the coatings and cleanup/purge materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual average hourly and daily OC emissions for each such day, respectively, in pounds/hour and pounds/day .
 - b. identification of each day when volatile photochemically reactive materials were loaded in this emissions unit. Each report shall identify the cause for the use of the volatile photochemically reactive material(s) and the estimated total quantity of volatile photochemically reactive material(s) loaded during each such day, in gallons.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling 12-month throughput restrictions listed in B.3 above. These reports are due by the date described in Part I- General Terms and Conditions of this permit under section (A)(2).
 3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month total facility VOC emissions limitation. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
3.665 pounds per 1000 gallons of liquid chemicals loaded

Applicable Compliance Method:

The highest VOC loading loss (worst case) was established with the following equation from AP-42, 5th Edition, January, 1995, Chapter 5.2

$$L = (12.46SPM)/T$$

where:

L = 3.665 the loading loss [in pounds of VOC per thousand gallons loaded];
S = 0.60 [saturation factor for submerged loading tank trucks];
P = 2.90 psia [true vapor pressure, Shellsol B HT, the highest vapor pressure liquid at facility];
M = 86.17 lb/lb-mole [molecular weight of Shellsol B HT]; and
T = 509.7 R [absolute temperature, in Rankin, of bulk Shellsol B HT loaded].

b. Emission Limitation:

1.3 tons per year, based upon the throughput restrictions of B.3

Applicable Compliance Method:

AP-42.5.2-4, 5th edition, January, 1995, Chapter 5.2, and the record keeping requirements of C.2 above.

c. Emission Limitation:

8 pounds of OCs per hour and 40 pounds of OCs per day

Applicable Compliance Method:

The record keeping requirements of C.1 above.

d. Emission Limitation:

VOC emissions from this facility shall not exceed 9.2 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

FBC Chemical Corp
PTI Application: 16-02419
Issue

Facility ID: 1652050190

Emissions Unit ID: J001

USEPA's "Tanks Program", version 4.09, or most current version, and AP-42.5.2-4, 5th Edition, January, 1995, Chapter 5.2, and the record keeping requirements of C.3 above.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the facility's maximum annual emissions for each toxic pollutant will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for the facility if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.
2. Except for term F.1, all terms/conditions of this permit are federally enforceable.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-21-07(G)(2)
<p>J002 (Drum Loading Rack) filling 55-gallon drums from storage tanks with organic liquids, 3300 gallon/hour pumping rate capacity, emissions of organic compounds (OCs) and volatile organic compounds (VOCs) uncontrolled.</p>	OAC rule 3745-31-05(A)(3)	
<p>This facility consists of: F001 (Roadway/Parking Area), J001 (Truck Loading Rack), J002 (Drum Loading Rack), T001 (Storage Tank T-18), & nineteen (19) OAC rule 3745-31-03 permit-exempt storage tanks: T-1A, T1-B, T-2, T-3, T-4, T-5, T-6, T-7, T-8, T-9, T-10, T-11, T-12, T-13, T-14, T-15, T-16, T-17, & T-19.</p>	OAC rule 3745-21-07(B)	OAC rule 3745-31-05(C) (to avoid moderate nonattainment program requirements);

Applicable Emissions
Limitations/Control Measures

VOC emissions from this emissions unit shall not exceed:

3.054 pounds per 1000 gallons of liquid chemicals loaded; and

1.3 tons per year, based upon the throughput restrictions of B.2 below.

The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-07(B), OAC rule 3745-21-07(G)(2), OAC rule 3745-31-05(C), and OAC rule 3745-35-07(B).

The permittee satisfies the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

On any day when PRMs, as defined by OAC rule 3745-21-01(C)(5), are used, the following emission limits shall apply:

8 pounds of OCs per hour; and
40 pounds of OCs per day.

Emissions from all organic liquids used, not only from PRMs, shall be counted in the total OC emissions.

VOC emissions from this facility shall not exceed 9.2 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Also see A.2.b and A.2.c

2. Additional Terms and Conditions

2.a Before any proposed change(s), such as with chemicals pumped, physical construction or design of the loading rack, etc., or any other change(s) that increase(s) the potential to emit, the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

2.b The following is an inclusive list of chemicals used at the facility:

Mineral Spirits (Stoddard Solvent);
VM&P Naphtha;
Toluene;
Methyl Ethyl Ketone (MEK);
Xylene;
Ethyl Alcohol (Ethanol);
Isopropyl Alcohol (IPA);
Calumet 420-460;
Calumet 4257;
Calumet 200-230;
Calumet 208; and
Shellsol B HT.

Except for toluene and xylene, none of the above listed chemicals are photochemically reactive materials (PRMs), as defined by OAC rule 3745-21-01(C)(5).

2.c In order to maintain this facility as a minor source of VOCs and hazardous air pollutants (HAPs), thus avoiding Title V and New Source Review moderate nonattainment program requirements, the permittee requested federally enforceable chemical throughput restrictions to limit the potential to emit below major source emission thresholds.

B. Operational Restrictions

1. No mixing or blending of chemicals shall be performed at this facility.
2. The permittee shall restrict the annual throughput of each chemical of the drum loading rack, as specified in the table below under "Maximum Allowable Annual Throughput". The drum loading rack throughput restrictions are a part of the facility's synthetic minor strategy to limit the potential to emit (PTE) below major source thresholds.

Chemical*	Vapor Pressure (psia @ 71.9 F)	Drum Loading Rack Maximum Allowable Annual Throughput (gallons/year)**
Stoddard Solvent	0.02	20,000
VM&P Naphtha	0.32	20,000
Toluene	0.503	150,000
MEK	1.5	75,000
Xylene	0.209	45,000
Ethanol	0.967	45,000
IPA	0.724	300,000
Calumet 420-460	0.002	740,000
Calumet 4257	1.95	300,000
Calumet 200-230	0.95	125,000
Calumet 208	1.25	300,000
Shellsol B HT	2.9	300,000

*Except for toluene and xylene, none of the above listed chemicals are photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(5).

**Each annual throughput restriction is based upon a rolling, 12-month summation of the monthly throughput..

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each day photochemically reactive materials are loaded in the emissions unit:
 - a. the company identification of each organic liquid loaded;
 - b. the number of gallons of each organic liquid loaded;
 - c. the OC content (density) of each organic liquid loaded;
 - d. the total OC emissions from all organic liquids loaded, in pounds of OCs/day, i.e., the sum of [b x c], respectively, for all organic liquids loaded.
 - e. the hours the emissions unit was in operation; and

- f. the average hourly OC emissions, in pounds of OCs/hour, i.e., $f = d/e$.
2. For the drum loading rack, the permittee shall maintain monthly records of the following information:
 - a. the monthly throughput for each chemical loaded;
 - b. the rolling, 12-month summation of the monthly throughput for each chemical loaded;
 - c. the monthly total VOC emissions for all chemicals loaded; and
 - d. the rolling, 12-month summation of the monthly total VOC emissions for all chemicals loaded.
 3. For the facility, the permittee shall maintain monthly records of the following information:
 - a. the monthly total facility VOC emissions from all chemicals used at the facility, i.e., all storage tanks, the truck loading rack, and the drum loading rack; and
 - b. the rolling, 12-month summation of the monthly total VOC emissions from the facility, i.e., all storage tanks, the truck loading rack, and the drum loading rack.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which includes identification of each day when photochemically reactive materials were used during which the OC emissions from the coatings and cleanup/purge materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual average hourly and daily OC emissions for each such day, respectively, in pounds/hour and pounds/day. These reports are due by the date described in Part I- General Terms and Conditions of this permit under section (A)(2).
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling 12-month throughput restrictions listed in B.2 above. These reports are due by the date described in Part I- General Terms and Conditions of this permit under section (A)(2).

Emissions Unit ID: **J002**

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month total facility VOC emissions limitation. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:

3.054 pounds per 1000 gallons of liquid chemicals loaded

Applicable Compliance Method:

The highest VOC loading loss (worst case) was established with the following equation from AP-42, 5th Edition, January, 1995, Chapter 5.2

$$L = (12.46SPM)/T$$

where:

L = 3.054 the loading loss [in pounds of VOC per thousand gallons loaded];
 S = 0.50 [saturation factor for submerged loading clean cargo tank];
 P = 2.90 psia [true vapor pressure, Shellsol B HT, the highest vapor pressure liquid at facility];
 M = 86.17 lb/lb-mole [molecular weight of Shellsol B HT]; and
 T = 509.7 R [absolute temperature, in Rankin, of bulk Shellsol B HT loaded].

- b. Emission Limitation:

1.3 tons per year, based upon the throughput restrictions of B.2

Applicable Compliance Method:

AP-42.5.2-4, 5th edition, January, 1995, Chapter 5.2, and the record keeping requirements of C.2 above.

c. Emission Limitation:

8 pounds of OCs per hour and 40 pounds of OCs per day

Applicable Compliance Method:

The record keeping requirements of C.1 above.

d. Emission Limitation:

VOC emissions from this facility shall not exceed 9.2 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

USEPA's "Tanks Program", version 4.09, or most current version, and AP-42.5.2-4, 5th Edition, January, 1995, Chapter 5.2, and the record keeping requirements of C.3 above.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the facility's maximum annual emissions for each toxic pollutant will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for the facility if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.
2. Except for term F.1, all terms/conditions of this permit are federally enforceable.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
<p>T001 (Storage Tank T-18) 39,784-gallon capacity, fixed roof tank storing petroleum liquids (Shellsol B HT, a petroleum-derived industrial solvent, with a maximum true vapor pressure of 2.90 psia), using submerged fill and vapor balance to reduce emissions of volatile organic compounds (VOCs).</p> <p>This facility consists of: F001 (Roadway/Parking Area), J001 (Truck Loading Rack), J002 (Drum Loading Rack), T001 (Storage Tank T-18), & nineteen (19) OAC rule 3745-31-03 permit-exempt storage tanks: T-1A, T1-B, T-2, T-3, T-4, T-5, T-6, T-7, T-8, T-9, T-10, T-11, T-12, T-13, T-14, T-15, T-16, T-17, & T-19.</p>	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-31-05(C) (to avoid moderate nonattainment program requirements);</p> <p>40 CFR 60, Subpart Kb</p> <p>OAC rule 3745-21-09(L)</p>

Applicable Emissions
Limitations/Control Measures

VOC emissions from this emissions unit shall not exceed 2.1 tons per year, based upon a rolling, 12-month throughput of 600,000 gallons.

This emissions unit shall be equipped with: (1) "submerged fill pipe(s)", as defined by OAC rule 3745-21-01 (C)(6), to within 6 inches of the bottom of the storage tank; and (2) a vapor return system to control air emissions of VOCs.

The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-09(L), OAC rule 3745-31-05(C), OAC rule 3745-35-07(B), and federal rule 40 CFR 60, Subpart Kb.

In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

VOC emissions from this facility shall not exceed 9.2 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Also see A.2.b and A.2.c.

This emissions unit is exempt from the control requirements of 40 CFR 60, Subpart Kb, but shall comply with 40 CFR 60.116b (a), (b), (c), and (d). [See C.1 and D.1 below.]

2. Additional Terms and Conditions

2.a Before any proposed change(s), such as with stored contents, physical construction or design of the storage vessel, etc., or any other change(s) that increase(s) the potential to emit, the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

2.b The following is an inclusive list of chemicals used at the facility:

Mineral Spirits (Stoddard Solvent);
VM&P Naphtha;
Toluene;
Methyl Ethyl Ketone (MEK);
Xylene;
Ethyl Alcohol (Ethanol);
Isopropyl Alcohol (IPA);
Calumet 420-460;
Calumet 4257;
Calumet 200-230;
Calumet 208; and
Shellsol B HT.

Except for toluene and xylene, none of the above listed chemicals are photochemically reactive materials (PRMs), as defined by OAC rule 3745-21-01(C)(5).

2.c In order to maintain this facility as a minor source of VOCs and hazardous air pollutants (HAPs), thus avoiding Title V and New Source Review moderate nonattainment program requirements, the permittee requested federally enforceable chemical throughput restrictions to limit the potential to emit below major source emission thresholds.

B. Operational Restrictions

1. The permittee shall restrict the annual throughput for each chemical of each storage tank, as specified in the table below under "Maximum Allowable Annual Throughput". The storage tank throughput restrictions are a part of the facility's synthetic minor strategy to limit the potential to emit (PTE) below major source thresholds. Each chemical used at the facility shall only be stored in specific storage tank(s), as

assigned below. These assignments shall not change unless this permit is modified or a new permit is issued to change these assignments.

Tank No.	Capacity (gallons)	Chemical	Vapor Pressure (psia @ 71.9 F)	Maximum Allowable Annual Throughput (gallons/year)*
T-1A	5,000	Stoddard Solvent	0.02	40,000
T-1B	5,000	VM&P Naphtha	0.32	40,000
T-2	10,000	Toluene	0.503	125,000
T-3	10,000	MEK	1.5	150,000
T-4	10,000	Xylene	0.209	90,000
T-5	10,000	Ethanol	0.967	90,000
T-6	12,000	Toluene	0.503	150,000
T-7	12,000	IPA	0.724	20,000
T-8	12,000	Calumet 420-460	0.002	20,000
T-9	12,000	Calumet 420-460	0.002	20,000
T-10	12,000	Calumet 4257	1.95	20,000
T-11	12,000	Calumet 200-230	0.95	250,000
T-12	12,000	Calumet 208	1.25	20,000
T-13	12,000	Shellsol B HT	2.9	20,000
T-14	46,532	Calumet 420-460	0.002	720,000
T-15	46,532	Calumet 420-460	0.002	720,000
T-16	39,784	Calumet 208	1.25	600,000
T-17	39,784	IPA	0.724	600,000
T-18	39,784	Shellsol B HT	2.9	600,000
T-19	39,784	Calumet 4257	1.95	600,000

*Each annual throughput restriction is based upon a rolling, 12-month summation of the monthly throughput.

C. Monitoring and/or Recordkeeping Requirements

1. In accordance with the requirements of 40 CFR 60.116b (a), (b), and (c) the permittee of this storage vessel shall keep readily accessible records, for the life of the source, showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

2. The permittee shall maintain a record of any period of time in which the vapor balance system and/or submerged fill were not employed as required in this permit.
3. For the storage tanks, the permittee shall maintain monthly records of the following information:
 - a. the monthly throughput for each chemical used in each storage tank;
 - b. the rolling, 12-month summation of the monthly throughput for each chemical used in each storage tank;
 - c. the monthly total VOC emissions for all chemicals used from all storage tanks; and
 - d. the rolling, 12-month summation of the monthly total VOC emissions for all chemicals used from all storage tanks.
4. For the facility, the permittee shall maintain monthly records of the following information:
 - a. the monthly total facility VOC emissions from all chemicals used at the facility, i.e., all storage tanks, the truck loading rack, and the drum loading rack; and
 - b. the rolling, 12-month summation of the monthly total VOC emissions from the facility, i.e., all storage tanks, the truck loading rack, and the drum loading rack.

D. Reporting Requirements

1. In accordance with the requirements of 40 CFR 60.116b (d), the permittee of this storage vessel shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.
2. The permittee shall notify the director (the appropriate Ohio EPA District Office or local air agency) within 30 days of the occurrence, of any period of time in which the vapor balance system and/or submerged fill were/was not employed as required in this permit.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling 12-month throughput restrictions listed in B.1 above. These reports are due by the date described in Part I- General Terms and Conditions of this permit under section (A)(2).
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month total facility VOC emissions limitation. These reports are due by the dates described in Part I - General Terms and Conditions of this permit under section (A)(2).
5. This emissions unit is subject to the applicable provisions of Subpart Kb of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. Construction date (no later than 30 days after such date);
- b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. Actual start-up date (within 15 days after such date); and
- d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Akron Regional Air Quality Management District (ARAQMD)
146 S High Street -- Room 904
Akron, OH 44308

E. Testing Requirements

1. Compliance with the VOC emissions limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 2.1 tons per year, based upon a rolling, 12-month throughput of 600,000 gallons.

Applicable Compliance Method:

USEPA's "Tanks Program", version 4.09, or most current version

- b. Emission Limitation:

VOC emissions from this facility shall not exceed 9.2 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

USEPA's "Tanks Program", version 4.09, or most current version, and AP-42.5.2-4, 5th edition, January, 1995, Chapter 5.2, and the record keeping requirements of C.4 above.

F. Miscellaneous Requirements

FBC Chemical Corp
PTI Application: 16-02419
Issue

Facility ID: 1652050190

Emissions Unit ID: T001

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the facility's maximum annual emissions for each toxic pollutant will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for the facility if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.
2. Except for term F.1, all terms/conditions of this permit are federally enforceable.