



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: May 31, 2023

Effective Date: May 31, 2023

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 09-00015

Federal Tax Id - Plant Code: 23-1028370-3

Owner Information

Name: ROHM & HAAS CO  
Mailing Address: 200 ROUTE 413  
BRISTOL, PA 19007-3606

Plant Information

Plant: ROHM & HAAS CO/BRISTOL  
Location: 09 Bucks County 09001 Bristol Township  
SIC Code: 2821 Manufacturing - Plastics Materials And Resins

Operator

Name: ROHM & HAAS CHEM LLC [If different from owner]  
Mailing Address: 200 ROUTE 413  
BRISTOL, PA 19007-3606

Responsible Official

Name: PATRICK PEDROTTI  
Title: SR SITE MANUFACTURING LDR  
Phone (215) 785 - 7026 Email: ppedrotti@dow.com

Permit Contact Person

Name: BRANDON SHIMP  
Title: ENVIRONMENTAL MANAGER  
Phone: (215) 781 - 4737 Email: bshimp@dow.com

[Signature]

JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER



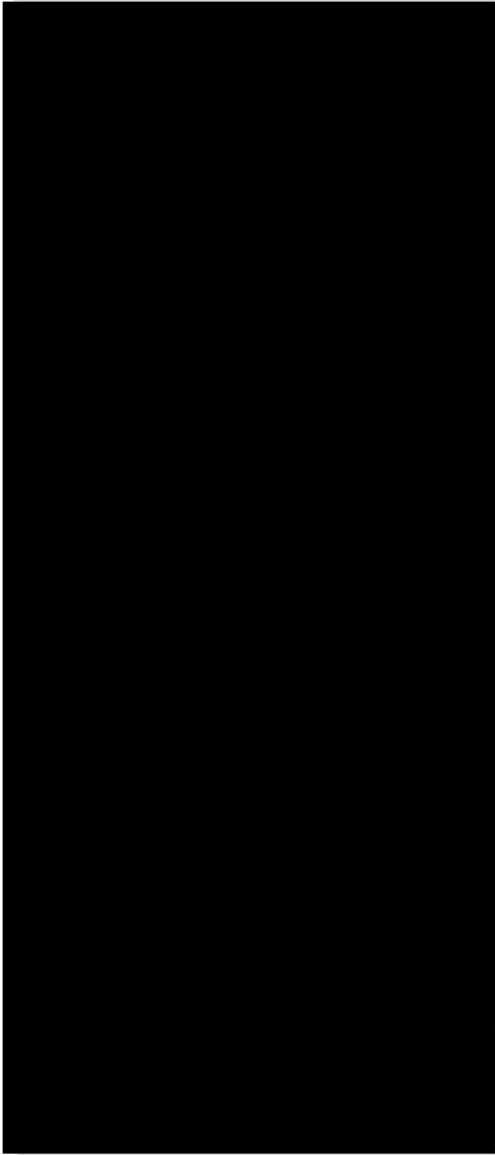


**SECTION A. Site Inventory List**

| Source ID | Source Name                          | Capacity/Throughput | Fuel/Material         |
|-----------|--------------------------------------|---------------------|-----------------------|
|           |                                      |                     |                       |
| 401       | CRU PROCESS (CROYDON)                | 30.500 Tons/HR      | ACRYLIC               |
|           |                                      |                     |                       |
| 441       | CRUX PROCESS (CROYDON)               | 6.300 Tons/HR       | ACRYLIC EMULSION      |
|           |                                      |                     |                       |
| 744A      | RAW MATERIAL STORAGE TANKS (BRISTOL) | N/A                 | VOC EMISSIONS FROM T/ |
|           |                                      |                     |                       |
| C09       | CATALYTIC OXIDIZER                   | N/A                 | VOC                   |
| C18       | REGENERATIVE THERMAL OXIDIZER        | N/A                 | VOC                   |
|           |                                      |                     |                       |



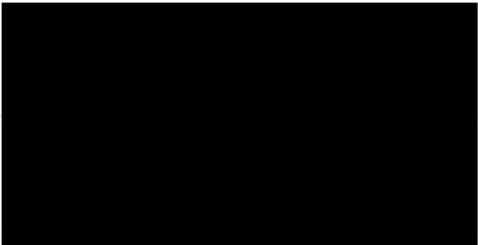
## PERMIT MAPS



PROC 401 → CNTL C09 → STAC S09

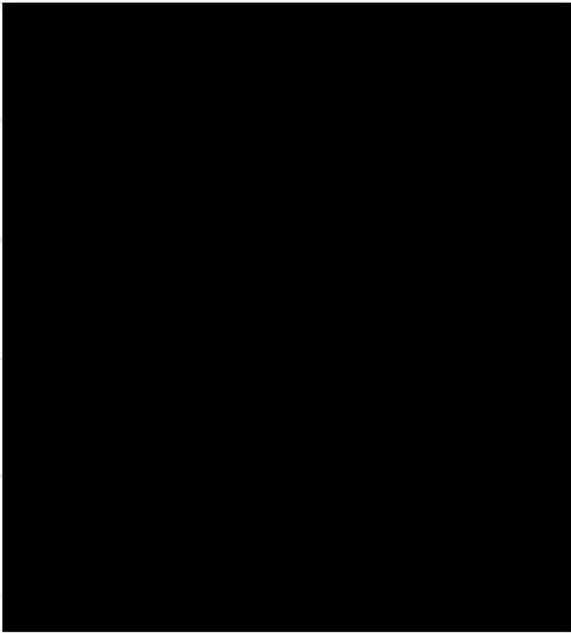


PROC 441 → CNTL C09 → STAC S09





## PERMIT MAPS

PROC  
744ACNTL  
C18STAC  
S18

Pages 7-71 Redacted

**SECTION D. Source Level Requirements**

Source ID: C09

Source Name: CATALYTIC OXIDIZER

Source Capacity/Throughput

N/A

VOC

CNTL  
C09STAC  
S09**I. RESTRICTIONS.****Control Device Efficiency Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Catalytic Oxidizer (Source C09), which controls pollutant emissions from the CRU and CRUX Processes, shall achieve 98% destruction efficiency for VOC or an outlet concentration not exceeding 20 ppmv measured as propane.

**II. TESTING REQUIREMENTS.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall perform a stack test on the Catalytic Oxidizer (Source C09) using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. In accordance with 25 Pa. Code § 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PADEP Source Testing Manual.

(b) The stack test shall, at a minimum, test for VOCs, [REDACTED] and [REDACTED] Tests shall be conducted in accordance with the provisions of EPA Methods 3A, 7E, 10, and 25A, or other Department approved methodology and 25 Pa. Code Chapter 139. Tests shall also be conducted in accordance with the provisions of the current version of the DEP Source Testing Manual and the EPA Clean Air Act National Stack Testing Guidance.

(c) At least ninety (90) days prior to the test, the company shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), an electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

**III. MONITORING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the following operational parameters for the Catalytic Oxidizer (Source C09):

(a) The inlet and outlet temperature continuously. The temperature monitoring shall be performed using a thermocouple or

**SECTION D. Source Level Requirements**

other Department approved method.

(b) Monitor the airflow or fan amperage on a daily basis and prior to routing a source's exhaust to the oxidizer, and before and after subsequent sources are put into service.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 004 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

(a) The permittee shall record all excursions and corrective actions taken in response to an excursion and the time elapsed until the corrective actions have been taken.

(d) All records shall be kept for a period of five (5) years and shall be made available to the Department upon request.

**# 005 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

(a) The permittee shall maintain records of the following operational parameters for the Catalytic Oxidizer (Source C09):

(i) Inlet and outlet temperature continuously;

(ii) The airflow or fan amperage prior to and after putting a source on line that exhausts to this catalytic oxidizer.

(b) Recordkeeping of the above operational parameters may be done with strip charts recorders, data acquisition systems, or manual log entries.

**V. REPORTING REQUIREMENTS.**

**# 006 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

The permittee shall submit reports of all excursions and corrective actions taken, the dates, times, durations and probable causes, every six (6) months.

**# 007**

Operating permit terms and conditions.

**VI. WORK PRACTICE REQUIREMENTS.**

**# 008 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

**SECTION D. Source Level Requirements**

(a) The Catalytic Oxidizer (Source C09) shall be operated at a minimum temperature of 550°F measured at the inlet to the catalyst bed.

(b) The permittee shall adhere to the approved minimum temperature for the catalytic oxidizer so that operation at the minimum temperature shall provide reasonable assurance of compliance. A departure from the minimum temperature over any fifteen (15) minute period shall be defined as an excursion.

# 009

Operating permit terms and conditions.

# 010

Operating permit terms and conditions.

# 011

Operating permit terms and conditions.

# 012

Operating permit terms and conditions.

# 013

Operating permit terms and conditions.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

# 014

Operating permit terms and conditions.

# 015

Operating permit terms and conditions.

# 016

Operating permit terms and conditions.

# 017

Operating permit terms and conditions.

**SECTION D. Source Level Requirements**

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: C18

Source Name: REGENERATIVE THERMAL OXIDIZER

Source Capacity/Throughput

N/A

VOC

Conditions for this source occur in the following groups: GROUP 4

CNTL  
C18STAC  
S18**I. RESTRICTIONS.****Control Device Efficiency Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]

The Regenerative Thermal Oxidizer (Source C18) shall have a minimum 98% efficiency for reduction of volatile organic compounds (VOC), [REDACTED] or an outlet concentration not exceeding 20 parts per million (ppmv), measured as propane.

**II. TESTING REQUIREMENTS.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall perform a stack test on the Regenerative Thermal Oxidizer (Source C18) using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. In accordance with 25 Pa. Code § 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When determining the VOC destruction efficiency of a thermal oxidizer, the source shall be operated within normal parametric ranges and the oxidizer shall be maintained at the minimum temperature that it will ever be operated. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PADEP Source Testing Manual.

(b) The stack test shall, at a minimum, test for VOCs, [REDACTED] and [REDACTED]. Tests shall be conducted in accordance with the provisions of Department approved methodology and 25 Pa. Code Chapter 139. Tests shall also be conducted in accordance with the provisions of the current version of the DEP Source Testing Manual and the EPA Clean Air Act National Stack Testing Guidance.

(c) At least ninety (90) days prior to the test, the company shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

[REDACTED]

(a) Continuously monitor the inlet, combustion chamber, and outlet temperatures of the Regenerative Thermal Oxidizer (Source C18), when operating. The temperature monitoring shall be performed using a Department approved method.

(b) Monitor the airflow or fan amperage on a daily basis and prior to routing a source's exhaust to the oxidizer, and before and after subsequent sources are put into service.

**IV. RECORDKEEPING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

[REDACTED]

(a) The permittee shall record all excursions and corrective actions taken in response to an excursion and the time elapsed until the corrective actions have been taken.

[REDACTED]

(d) All records shall be kept for a period of five (5) years and shall be made available to the Department upon request.

**# 005 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

[REDACTED]

(a) The permittee shall maintain records the following operational parameters for the Regenerative Thermal Oxidizer (Source C18):

(i) Inlet, combustion chamber, and outlet temperatures of the RTO continuously, when operating;

(ii) The airflow or fan amperage on a daily basis, prior to and after putting a source on line that exhausts to this regenerative thermal oxidizer.

(b) Recordkeeping for the above operational parameters may be done with strip charts recorders, data acquisition systems, or manual log entries.

**V. REPORTING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

[REDACTED]

The permittee shall report all excursions and corrective actions taken, the dates, times, durations and probable causes, every six (6) months.

**# 007**

Operating permit terms and conditions.

[REDACTED]

**SECTION D. Source Level Requirements**

[REDACTED]

**VI. WORK PRACTICE REQUIREMENTS.****# 008 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

[REDACTED]

(a) The Regenerative Thermal Oxidizer (Source C18) shall be operated at a minimum temperature of 1,450°F measured at the outlet of the combustion chamber. These temperatures may be modified by the Department based on the performance test conducted on the RTO.

(b) The permittee shall adhere to the minimum temperature for the Regenerative Thermal Oxidizer (Source C18) so that operation at this minimum temperature shall provide reasonable assurance of compliance. A departure from the minimum temperature over any fifteen (15) minute period shall be defined as an excursion.

**# 009 [REDACTED]**

Operating permit terms and conditions.

[REDACTED]

**# 010 [REDACTED]**

Operating permit terms and conditions.

[REDACTED]

**# 011 [REDACTED]**

Operating permit terms and conditions.

[REDACTED]

**# 012 [REDACTED]**

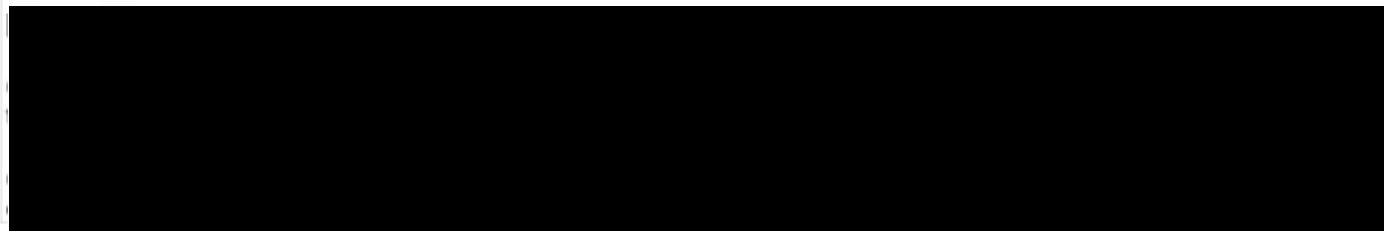
Operating permit terms and conditions.

[REDACTED]

**SECTION D. Source Level Requirements**

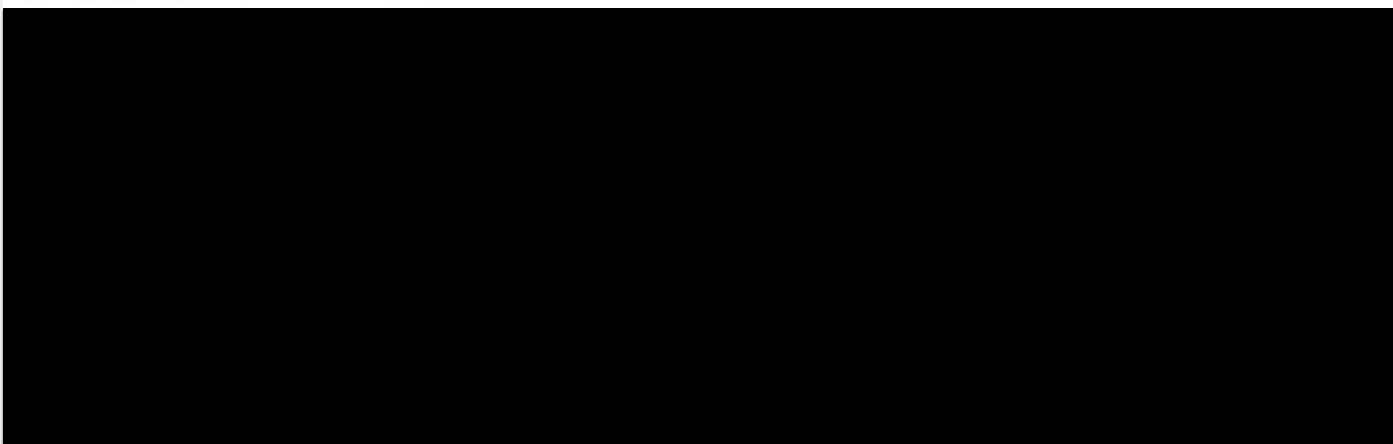
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Operating permit terms and conditions.

**VII. ADDITIONAL REQUIREMENTS.**

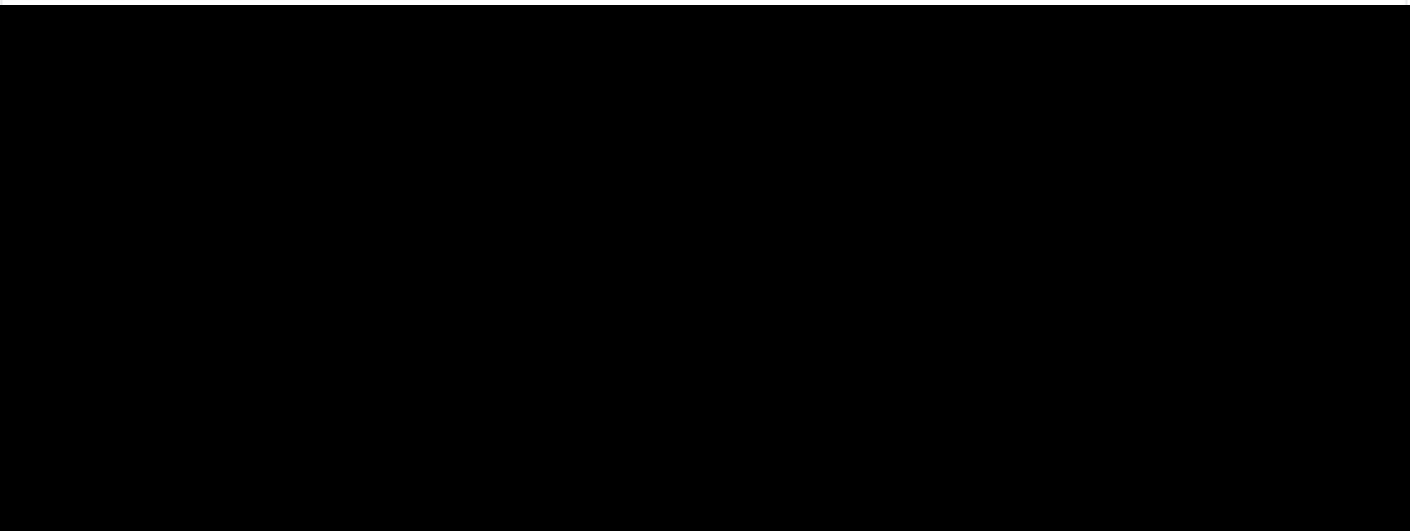
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Operating permit terms and conditions.



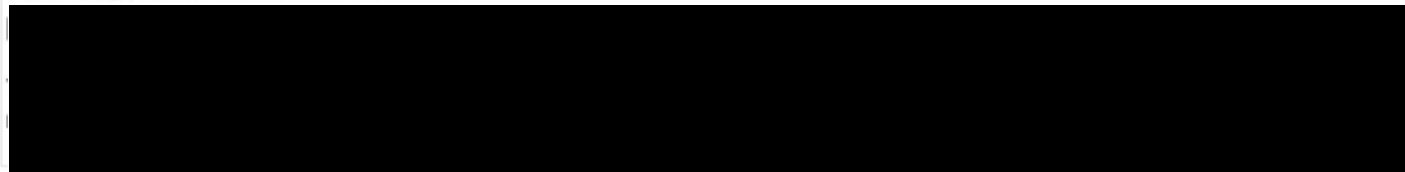
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Operating permit terms and conditions.



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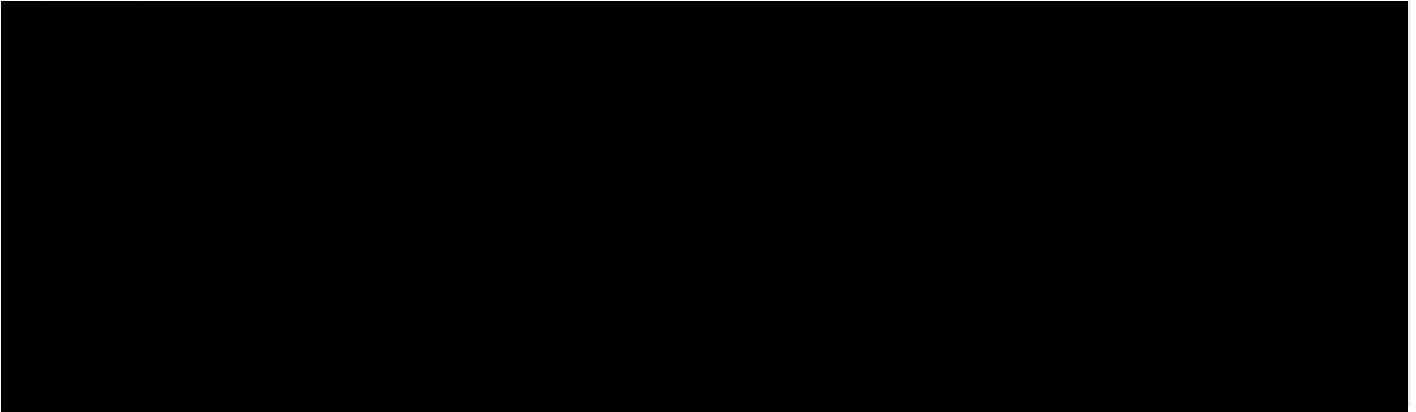
Operating permit terms and conditions.



**SECTION D. Source Level Requirements**

# 017

Operating permit terms and conditions.

**\*\*\* Permit Shield in Effect. \*\*\***

Pages 82-105 Redacted



\*\*\*\*\* End of Report \*\*\*\*\*

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