

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

**Permit Evaluation
and
Statement of Basis
for the
MAJOR FACILITY REVIEW PERMIT
Reopening – Revision 1
for
Dow Chemical Company
Facility #A0031**

Facility Address:
901 Lovelidge Road
Pittsburg, CA 94565

Mailing Address:
P. O. Box 1398
Pittsburg, CA 94565

May, 2004

TABLE OF CONTENTS

A.	Background	3
B.	Facility Description	5
C.	Permit Content.....	5
I.	Standard Conditions.....	5
II.	Equipment.....	5
III.	Generally Applicable Requirements.....	6
IV.	Source-Specific Applicable Requirements	6
V.	Schedule of Compliance	7
VI.	Permit Conditions	8
VII.	Applicable Limits and Compliance Monitoring Requirements	9
VIII.	Test Methods.....	10
IX.	Permit Shield:	10
D.	Alternate Operating Scenario:	10
E.	Compliance Status:.....	10

Title V Statement of Basis

This Statement of Basis accompanies the District's proposal to revise the Major Facility Review (also, "Title V") permit issued on December 1, 2003. This would be the first revision to the permit. The purpose of this revision is to incorporate a set of District permit conditions that were not incorporated when the permit was initially issued. As explained below, these omitted conditions have since been revised to make them publicly available, and are now being incorporated into the Title V permit in the publicly available form. In an unrelated action, this revision to the Title V permit also deletes the schedule of compliance for addressing federal case-by-case MACT standards. The basis for these actions is explained below. The Statement of Basis also includes general information explaining the structure of the permit.

A. Background

This facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Volume 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a major facility as defined by BAAQMD Regulation 2-6-212. It was designated a major facility because it had the "potential to emit," as defined by BAAQMD Regulation 2-6-218, of more than:

- 100 tons per year of a regulated air pollutant;
- 10 tons per year of a hazardous air pollutant; or
- 25 tons per year of a combination of hazardous air pollutants.

Major Facility Operating permits (Title V permits) must meet specifications contained in 40 CFR Part 70 as contained in BAAQMD Regulation 2, Rule 6. The permits must contain all applicable requirements (as defined in BAAQMD Regulation 2-6-202), monitoring requirements, recordkeeping requirements, and reporting requirements. The permit holders must submit reports of all monitoring at least every six months and compliance certifications at least every year. In the Bay Area, state and District requirements are also applicable requirements and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. All applicable requirements are contained in Sections I through VI of the permit. Each facility in the Bay Area is assigned a facility identifier that consists of a letter and a 4-digit number. This identifier is also considered to be the identifier for the permit. The identifier for this facility is A0031.

As noted above, the proposed revision would incorporate into the Title V permit certain District permit conditions that were not incorporated when it was issued on December 1, 2003. These conditions were not incorporated because they had originally been issued subject to trade secret status – a fact that did not come to light until fairly close to the December 1, 2003 deadline for issuing the Title V permit. Because Title V permits may not include conditions that are not publicly available, the District on October 14, 2003, proposed issuance of the Title V permit omitting those conditions, and explained in the Statement of Basis accompanying that proposal that it would remedy the situation either by contesting the trade secret status of the conditions or by translating the conditions into

publicly available emissions limits. No comment was received on this aspect of the proposal, and the Title V permit was issued without the trade secret conditions included.

In the October 14, 2003, Statement of Basis, the District stated its intent to delete the trade secret limits pending resolution of the issue in one of the two ways identified. This statement implied that not only would the trade secret conditions be omitted from the Title V Permit, but that they would altogether cease to exist as enforceable limits. In fact, the trade secret conditions were not deleted, and remained as they had historically existed – enforceable but not publicly available. Deletion of the conditions was not necessary in order to move forward with the exercise of translating the conditions into a publicly-available form. Moreover, deletion of the limits was at no time requested by Dow, and the District’s understanding from discussions with Dow representatives is that Dow never considered itself to be out from under the authority of these conditions. Again, because no comment was received on this issue, no further explanation was offered beyond that found in the October 14, 2003, Statement of Basis accompanying the proposed issuance. As far as the District was aware, there was no concern from any member of the public that should have caused it to consider other options or offer further explanation.

In the Statement of Basis for the October 14, 2003, proposal to issue the Title V permit, the District stated that it was still reviewing the regulatory purpose of the trade secret conditions, which in turn would inform whether any of the conditions could be deleted on a permanent basis. At the time of the Title V permit issuance, the District still had not completed this analysis. As explained in the March 1, 2004, Engineering Evaluation, some trade secret conditions were deleted altogether because they were found to be redundant.

On March 1, 2004, the trade secret conditions were the subject of a District permit action, specifically, an action to translate those limits into publicly available emission limits. The specific justification for this action was set forth in the March 1, 2004, Engineering Evaluation accompanying the change of conditions, which is attached hereto. The reader is referred to this Engineering Evaluation for further explanation of this action and a recounting of the events leading up to it. Today’s proposal is merely to incorporate these District permit conditions, which became effective and enforceable as of March 1, into the Title V permit so that the Title V permit reflects all requirement applicable to the Dow facility. In this way, today’s proposed revision to the Dow Title V permit, once finalized, will complete the District’s plan for resolution of the issues presented by the trade secret conditions.

The Custom Schedule of Compliance addressing the Part 2 MACT application requirements for the Organic Liquids Distribution MACT has been removed, as the application requirement was met and the MACT has now been promulgated.

The scope of this Permit Evaluation and Statement of Basis is limited to only those portions of the Major Facility Review Permit that are being revised. A more

comprehensive Permit Evaluation and Statement of Basis was prepared for the initial Major Facility Review Permit. That document is available on the District’s website and is incorporated here by reference. EPA has indicated that it intends to review the entire permit when it receives the “proposed” permit, as that term is used in Title V of the federal CAA. The District acknowledges that EPA has the authority to conduct this comprehensive review. The District will respond to any EPA comments and/or objections in accordance with the procedures of Title V, 40 CFR Part 70, and District Rule 2-6.

B. Facility Description

A description of the Facility can be found in the Statement of Basis accompanying the October 14, 2003, proposal for Title V permit issuance.

C. Permit Content

The legal and factual basis for the permit follows. The permit sections are described in the order presented in the permit.

I. Standard Conditions

This section contains administrative requirements and conditions that apply to all facilities. Many of these conditions derive from 40 CFR §70.6, Permit Content, which dictates certain standard conditions that must be placed in the permit. The language that the District has developed for many of these requirements has been adopted into the BAAQMD Manual of Procedures, Volume II, Part 3, Section 4, and therefore must appear in the permit.

There are no changes to the standard conditions under this reopening.

II. Equipment

This section of the permit lists all permitted or significant sources. Each source is identified by an S prefix and a number (e.g., S-24). Permitted sources, listed in Table IIA, are those sources that require a BAAQMD operating permit pursuant to BAAQMD Rule 2-1-302. Significant sources, listed in Table IIC, are those exempt sources that have a potential to emit of more than 2 tons of a “regulated air pollutant,” as defined in BAAQMD Rule 2-6-222, per year or 400 pounds of a “hazardous air pollutant,” as defined in BAAQMD Rule 2-6-210, per year.

All abatement (control) devices that control permitted or significant sources are listed in Table IIB. Each abatement device whose primary function is to reduce emissions is identified by an A prefix and a number (e.g., A-24). If a source also acts as an abatement device, such as when an engine controls VOC emissions, it will be listed in the abatement device table but will have an “S” number. An abatement device may also be a source (such as a thermal oxidizer that burns fuel) of secondary emissions. If the primary function of a device is to control emissions, it is considered an abatement (or “A”) device. If the primary function of a device is a non-control function, the device is considered to be a source (or “S”).

The equipment section is considered to be part of the facility description. It contains information that is necessary for applicability determinations, such as fuel types, contents or sizes of tanks, etc. This information is part of the factual basis of the permit. Each of the permitted sources has previously been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. These permits are issued in accordance with state law and the District’s regulations. The capacities in the permitted sources table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403. Significant sources are also included in this section, even if they are not required to hold a District permit to operate.

No changes were made to the equipment list under this reopening.

III. Generally Applicable Requirements

This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit. If a generally applicable requirement applies specifically to a source that is permitted or significant, the standard will also appear in Section IV and the monitoring for that requirement will appear in Sections IV and VII of the permit. Parts of this section apply to all facilities (e.g., particulate, architectural coating, odorous substance, and sandblasting standards). In addition, standards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound) are placed in this section.

Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered *significant sources* pursuant to the definition in BAAQMD Rule 2-6-239.

No changes were made to the generally applicable requirements under this reopening.

IV. Source-Specific Applicable Requirements

This section of the permit lists the applicable requirements that apply to permitted or significant sources. These applicable requirements are contained in tables that pertain to one or more sources that have the same requirements. The order of the requirements is:

- District Rules
- SIP Rules (if any) are listed following the corresponding District rules. SIP rules are District rules that have been approved by EPA for inclusion in the California State Implementation Plan. SIP rules are “federally enforceable” and a “Y” (yes) indication will appear in the “Federally Enforceable” column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the “Federally Enforceable” column will have a “Y” for “yes”. If the SIP rule is not the current District rule, the SIP rule or the necessary portion of the SIP rule is cited separately after the District rule. The SIP portion will be federally enforceable; the

non-SIP version will not be federally enforceable, unless EPA has approved it through another program.

- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal requirements (other than SIP provisions)
- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The text of Federal permit conditions, if any, is found in Section VI of the permit.

Section IV of the permit contains citations of *all* applicable requirements. The text of the requirements is found in the regulations, which are readily available on the District's or EPA's websites, or in the permit conditions, which are found in Section VI of the permit. The District's policy is to not include citations of exemptions as applicable requirements. Therefore, where no regulation applies to a specific operation due to one or more exemptions under the potentially applicable regulations, the source will not be included in Sections IV and VII of the permit unless specific permit conditions apply. All monitoring and recordkeeping requirements are also cited in Section IV.

A discussion of all complex applicability determinations was detailed in the Permit Evaluation and Statement of Basis that accompanied the original Major Facility Review Permit. That discussion is included here by reference. Only the changes to the source specific requirements as a result of this reopening are discussed in this document. These changes include:

- In the facility table of this section - Removal of the Part 2 application requirement for the Organic Liquid Distribution MACT and permit condition implementing the application requirement.
- In the source tables in this section – Modified references to only those permit conditions claimed as trade secret/confidential information.

These changes have been indicated in the revised Major Facility Review Permit in ~~strikeout~~/underline format. The specifics of these changes are discussed further below.

V. Schedule of Compliance

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10, which provides that a major facility review permit shall contain the following information and provisions:

409.10 A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;*
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and*
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility*

will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.”

The initial Major Facility Review Permit included a Custom Schedule of Compliance addressing the Part 2 MACT application requirements for the Organic Liquids Distribution MACT. The schedule set an application deadline of February 1, 2004 for submittal of a Part 2 application if the MACT had not been promulgated by this date. Dow submitted a Part 2 application for this MACT by January 30, 2004, meeting this deadline. The Schedule of Compliance is therefore being removed from the permit. Subsequently on February 3, 2004, EPA promulgated the Organic Liquids Distribution MACT. The facility has stated that it will comply with the promulgated MACT standard.

VI. Permit Conditions

Each permit condition is identified with a unique numerical identifier, up to five digits. The Title V permit contains all permit conditions for the permitted sources listed in Section II. During the Title V permit development, the District reviewed the existing permit conditions, deleted the obsolete conditions, and, as appropriate, revised the conditions for consistency, clarity, and enforceability. When necessary to meet Title V requirements, additional monitoring, recordkeeping, or reporting has been added to the permit.

The existing permit conditions are derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). Permit conditions may also be imposed or revised as part of the annual review of the facility by the District pursuant to California Health and Safety Code (H&SC) § 42301(e), through a variance pursuant to H&SC § 42350 *et seq.*, an order of abatement pursuant to H&SC § 42450 *et seq.*, or as an administrative revision initiated by District staff. After issuance of the Title V permit, permit conditions are revised using the procedures in Regulation 2, Rule 6, Major Facility Review.

Sources that were modified or constructed since the District began issuing new source review permits will have permits that contain throughput limits, and these limits are reflected in the Title V permit. These limits have previously undergone District review, and are considered to be the legally binding “emission level” for purposes of Sections 2-1-234.1 and 2-1-234.2. By contrast, for older sources that have never been through preconstruction review (commonly referred to as “grandfathered” sources), an “increase” in “emission level” is addressed in Section 2-1-234.3. A grandfathered source is not subject to preconstruction review unless its emission level increases above the highest of either: 1) the design capacity of the source, 2) the capacity listed in a permit to operate,

or 3) highest capacity demonstrated prior to March 2000. However, if the throughput capacity of a grandfathered source is limited by upstream or downstream equipment (i.e., is “bottlenecked”), then the relaxing of that limitation (“debottlenecking”) is considered a modification.

The regulatory basis is listed following each condition. The regulatory basis may be a rule or regulation. The District is also using the following terms for regulatory basis:

- BACT: This term is used for a condition imposed by the Air Pollution Control Officer (APCO) to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- Cumulative Increase: This term is used for a condition, imposed by the APCO, which limits a source’s operation to the operation described in the permit application pursuant to BAAQMD Regulation 2-1-403.
- Offsets: This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- PSD: This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit issued pursuant to Regulation 2, Rule 2.
- TRMP: This term is used for a condition imposed by the APCO to ensure compliance with limits that arise from the District’s Toxic Risk Management Policy.

VII. Applicable Limits and Compliance Monitoring Requirements

Section VII of the permit is a summary of only the *numerical limits and related monitoring requirements* for each source. Therefore, this section of the permit will not contain *all* of the requirements that are listed in Section IV of the permit, which is a complete list of applicable requirements, including emission limits and monitoring. The summary in Section VII includes a citation of the numerical limits and corresponding monitoring, frequency of monitoring, and type of monitoring. In many cases, the emission limit that applies to a source is met through operation of an abatement device. The citations of the requirement for such abatement and any non-numerical operational limits that apply to the abatement device have not been listed in these tables. In these cases, only the citation of the requirement for monitoring of the abatement device has been included.

The District reviewed all monitoring and determined the existing monitoring is adequate to provide a reasonable assurance of compliance or added additional monitoring through the initial Major Facility Review permit. A discussion of the comprehensive monitoring review was detailed in the Permit Evaluation and Statement of Basis that accompanied the original Major Facility Review Permit. That discussion is included here by reference. The only changes to the Applicable Limits and Compliance Monitoring Requirements under this reopening are modified references to those permit conditions that were claimed as trade secret/confidential information. In the cases where the confidential information claim has been retracted, the original numerical limits have been summarized in this

section. Where alternate emission limits have replaced the confidential information in the original permit conditions, the numerical emission limits have been summarized in this section. For those conditions that have been shown to be redundant limits, the references have been removed altogether. These changes have been shown in strikeout/underline format.

VIII. Test Methods

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements. If a rule or permit condition requires ongoing testing, the requirement will also appear in Section IV of the permit.

No changes were made to the Test Methods section of the permit under this reopening.

IX. Permit Shield

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in a major facility review permit explaining that specific federally enforceable regulations and standards do not apply to a source or group of sources, or (2) A provision in a major facility review permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA's White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. The District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting requirements in Title V permits. The District's program does not allow other types of streamlining in Title V permits.

This facility has neither type of permit shield. No changes are being proposed as a result of this reopening.

D. Alternate Operating Scenarios

No alternate operating scenario was included under the original Major Facility Review permit and no changes are being proposed as a result of this reopening.

E. Compliance Status

A complete review of the facility's compliance status was documented for the initial issuance of the Major Facility Review Permit. No change in compliance status has occurred since issuance.

APPENDIX A

Evaluation of Application #8894

APPENDIX B
GLOSSARY

AB2588

Assembly Bill 2588, Air Toxics “Hot Spots” Information and Assessment Act of 1987 – directs the California Air Resources Board and the Air Quality Management District to collect information from industry on emissions of potentially toxic air pollutants and to inform the public about such emissions and their impact on public health.

ACT

Federal Clean Air Act

alkene

A class of unsaturated aliphatic hydrocarbons having one or more double bonds.

amine

A class of organic compounds of nitrogen.

APCO

Air Pollution Control Officer

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

BARCT

Best Available Retrofit Control Technology

Basis

The underlying authority that allows the District to impose requirements.

C2

An Organic chemical compound with two carbon atoms

C5

An Organic chemical compound with five carbon atoms

C6

An Organic chemical compound with six carbon atoms

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CAPCOA

California Air Pollution Control Officers Association

CEM

A "continuous emission monitor" is a monitoring device that provides a continuous direct measurement of some pollutant (e.g. NO_x concentration) in an exhaust stream.

CEQA

California Environmental Quality Act

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

Chlorinated heterocyclic

A closed ring compound in which one or more of the atoms in the ring is a chlorine atom.

Cl₂

chlorine

CO

Carbon Monoxide

CO₂

Carbon Dioxide

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Cumulative increase is used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

Dowanol®

A terminalized product, not produced at this facility.

Dowicil®

A preservative and antimicrobial produced at this facility.

Dowtherm

A heat transfer fluid.

dscf

Dry Standard Cubic Feet

E 6, E 9, E 12

Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53 E 6 equals $(4.53) \times (10^6) = (4.53) \times (10 \times 10 \times 10 \times 10 \times 10 \times 10)$

x 10) = 4,530,000. Scientific notation is used to express large or small numbers without writing out long strings of zeros.

EFRT

An "external floating roof tank" minimizes VOC emissions with a roof with floats on the surface of the liquid, thus preventing the formation of a VOC-rich vapor space above the liquid surface as the level in the tank drops. If such a vapor space were allowed to form, it would be expelled when the tank was re-filled. On an EFRT, the floating roof is not enclosed by a second, fixed tank roof, and is thus described as an "external" roof.

ester

An organic compound corresponding in structure to a salt.

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District regulations.

Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

FP

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

FR

Federal Register

FRT

Floating Roof Tank (See EFRT and IFRT)

GDF

Gasoline Dispensing Facility

GLM

Ground Level Monitor

grains

1/7000 of a pound

H₂S

Hydrogen Sulfide

Halogenated heterocycle

A closed ring compound in which one or more of the atoms on the ring is a halogen atom.

HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

HCl

Hydrogen chloride, hydrochloric acid.

HCl MACT

40 CFR Part 63, Subpart NNNNN

HF

Hydrogen fluoride, hydrofluoric acid.

Hg

Mercury

HHV

Higher Heating Value. The quantity of heat evolved as determined by a calorimeter where the combustion products are cooled to 60F and all water vapor is condensed to liquid.

IFRT

An "internal floating roof tank" minimizes VOC emissions with a roof with floats on the surface of the liquid, thus preventing the formation of a VOC-rich vapor space above the liquid surface as the level in the tank drops. If such a vapor space were allowed to form, it would be expelled when the tank was re-filled. On an IFRT, the floating roof is enclosed by a second, fixed tank roof, and thus is described as an "internal" roof.

LHV

Lower Heating Value. Similar to the higher heating value (see HHV) except that the water produced by the combustion is not condensed but retained as vapor at 60F.

KCl

Potassium chloride

KF

Potassium fluoride

KOH

Potassium hydroxide

Latex MACT

40 CFR Part 63, Subpart U

Lontrel

A solid herbicide produced at this facility, an organic acid.

Lorsban

A terminalized product, not produced at this facility.

Major Facility

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

MCA

Methyl chloroacetate

MEI

Methyl ester intermediate

MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

MOP

The District's Manual of Procedures.

MSDS

Material Safety Data Sheet

NA

Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

NMHC

Non-methane Hydrocarbons (Same as NMOC)

NMOC

Non-methane Organic Compounds (Same as NMHC)

NMP

N-methyl pyrrolidone

NO_x

Oxides of nitrogen.

N-Serve®

An agricultural product produced at this facility.

NSPS

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the

Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

O2

The chemical name for naturally-occurring oxygen gas.

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NOx, PM10, and SO2.

PAI MACT

40 CFR Part 63, Subpart MMM

Perc

Perchloroethylene

Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

Picoline

A methyl pyridine, an aromatic compound containing a nitrogen atom within the ring and an attached methyl group.

POC

Precursor Organic Compounds

PM

Particulate Matter

PM10

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

PRD

Pressure Relief Device

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

RCRA

Resource Conservation and Recovery Act, 40 CFR Part 266, Subpart H.

RMP

Risk Management Plan

SB Latex/Rubber

Styrene-butadiene latex/rubber, produced at this facility.

SCR

A "selective catalytic reduction" unit is an abatement device that reduces NO_x concentrations in the exhaust stream of a combustion device. SCRs utilize a catalyst, which operates at a specific temperature range, and injected ammonia to promote the conversion of NO_x compounds to nitrogen gas.

SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

SO₂

Sulfur dioxide

SO₂F₂

Sulfuryl fluoride

SO₃

Sulfur trioxide

Sym-Tet

Symmetrical tetrachloropyridine, an aromatic compound containing a nitrogen atom within the ring and 4 attached chlorine atoms

TCA

Trichloroethane

TCE

Trichloroethylene

THC

Total Hydrocarbons (NMHC + Methane)

therm

100,000 British Thermal Unit

Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

TOC

Total Organic Compounds (NMOC + Methane, Same as THC)

TRE

Total Resource Effectiveness

TRMP

Toxic Risk Management Plan

TSP

Total Suspended Particulate

TRS

"Total reduced sulfur" is a measure of the amount of sulfur-containing compounds in a gas stream, typically a fuel gas stream, including, but not limited to, hydrogen sulfide. The TRS content of a fuel gas determines the concentration of SO₂ that will be present in the combusted fuel gas, since sulfur compounds are converted to SO₂ by the combustion process.

TVP

True Vapor Pressure

Vikane®

Dow trade name for sulfuryl fluoride, a fumigant produced at this facility.

VOC

Volatile Organic Compounds

Units of Measure:

bhp	=	brake-horsepower
btu	=	British Thermal Unit
C	=	degrees Celcius
cfm	=	cubic feet per minute
F	=	degrees Fahrenheit
f ³	=	cubic feet
g	=	gram
gal	=	gallon
gpm	=	gallons per minute
gr	=	grain
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inch
max	=	maximum
M	=	thousand
m ²	=	square meter
Mg	=	mega-gram, one thousand grams
µg	=	micro-gram, one millionth of a gram

min	=	minute
mm	=	millimeter
MM	=	million
MMbtu	=	million btu
MMcf	=	million cubic feet
mm Hg	=	millimeters of Mercury (pressure)
MW	=	megawatts
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year

Symbols:

<	=	less than
>	=	greater than
≤	=	less than or equal to
≥	=	greater than or equal to