####  LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

 OFFICE OF ENVIRONMENTAL SERVICES

**STATEMENT OF BASIS[[1]](#footnote-1)**

**PROPOSED PART 70 OPERATING PERMIT 2840-00032-V5**

**Bradken-Amite facility**

# Bradkin, ltd.

# Amite, tangipahoa PARISH, LOUISIANA

**Agency Interest (AI) No. 2093**

**Activity No. PER20110004**

**I. APPLICANT**

The applicant is: Bradkin - Amite, Inc.

13040 Foulks Lane

 Amite, LA 70422

 Facility: Bradkin – Amite Facility

 SIC Code: 3325

Location: 13040 Foulks Lane

 Amite, Tangipahoa Parish, LA 70422.

**II. PERMITTING AUTHORITY**

 The permitting authority is: Louisiana Department of Environmental Quality

 Office of Environmental Services

 P.O. Box 4313

 Baton Rouge, Louisiana 70821-4313

**III. CONTACT INFORMATION**

 Additional information may be obtained from:

 Mr. Kermit Wittenburg

P.O. Box 4313

Baton Rouge, Louisiana 70821-4313

 Phone: (225) 219-3181

**IV. FACILITY BACKGROUND AND CURRENT PERMIT STATUS**

Amite Foundry and Machine, Inc. (AFM) purchased an inactive steel foundry near Amite in 1993 and restarted operations. The site was formally known as DBR Foundry which ceased operations in the late 1980’s. AFM had its first Title V, Permit No. 2840-00032-V0, issued October 5, 1999. The renewal permit for Amite Foundry was Permit No. 2840-00032-V1 issued April 25, 2007. The owner name is Bradken Ltd. and the facility name is Bradken-Amite, Facility. Bradken-Amite, Inc is currently operating under permit number 2840-00032-V4 issued April 20, 2011.

This permit addresses all emissions unit at the Bradken-Amite Facility.

**V.** **PROPOSED PERMIT/PROJECT INFORMATION**

A permit application and Emission Inventory Questionnaire (EIQ) dated October 8, 2011, were received requesting a permit renewal. The application was deemed administratively complete in accordance with LAC 33:III.519.A on October 31, 2011.

**Process Description**

Bradken-Amite, Inc produces steel castings for sugar mill, automotive, shipping, railroad, and other industries. Two electric arc furnaces (EAFs) melt scrap steel. Melted metal is poured into chemically-bonded sand molds. Manufacturing operations include: core and mold making, metal pouring and cooling, casting shakeout and shot blasting, casting finishing (welding, grinding, cutting, and torching), casting machining, metal annealing operations, and minor painting (as required). Supplemental operations include pattern making and repair, quality assurance/quality control, x-ray, wastes handling, transportation, and maintenance operations.

This permit modification will add new production equipment and building space in order to expand the production rate of the Bradken Amite Foundry:

The two current Electric Arc Furnaces (EAF’s) have sufficient capacity to attain the post expansion project target production of 54,600 tpy of melted steel. However, the current facility does not have sufficient floor space needed to build the cores and molds and allow for the cooling of the poured metal. This modification will authorize the additional floor space.

To create the new molds, a larger sand silo, as well as a new sand reclamation and shakeout unit will also need to be added. Lastly, a new Heat Treat Oven will be added. These changes will allow the production of the EAF’s to increase, resulting in more actual emissions.

 **Proposed Modifications**

No modifications are being requested with this renewal.

**VI. ATTAINMENT STATUS OF PARISH**

|  |  |  |
| --- | --- | --- |
| Pollutant | Attainment Status | Designation |
| PM2.5 | Attainment | N/A |
| PM10 | Attainment | N/A |
| SO2 | Attainment | N/A |
| NO2 | Attainment | N/A |
| CO | Attainment | N/A |
| Ozone[[2]](#footnote-2) | Attainment | N/A |
| Lead | Attainment | N/A |

**VII. PERMITTED AIR EMISSIONS**

Sources of air emissions are listed on the “Inventories” page of the proposed permit.

 Estimated emissions of criteria pollutants from the facility, in tons per year (TPY), are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| Pollutant | Before | After | Change |
| PM10 | 12.28 | 12.28 | - |
| PM2.5 | Not required | 8.64 | - |
| SO2 | 6.03 | 6.03 | - |
| NOX | 28.25 | 28.25 | - |
| CO | 188.59 | 188.59 | - |
| VOC | 59.57 | 59.57 | - |

PM10 and VOC compounds classified as LAC 33:III.Chapter 51-regulated toxic air pollutants (TAP) are speciated below. This list encompasses all Hazardous Air Pollutants (HAP) regulated pursuant to Section 112 of the Clean Air Act. Note, however, all TAPs are not HAPs (e.g., ammonia, hydrogen sulfide).

| VOC LAC 33:III. Chapter 51 Toxic Air Pollutants (TAPs): |
| --- |
| Pollutant |  Emissions (TPY) |
| Acetaldehyde | 0.14  |
| Acrolein | 0.18 |
| Benzene  | 1.12 |
| Cresol | 1.17 |
| Dibutylphthalate | 0.01 |
| Ethylbenzene | 0.05  |
| Formaldehyde | 0.34 |
| Glycol Ethers | 0.01 |
| Methylenediphenyl diisocyanate | 0.17 |
| Methyl Ethyl Ketone | 0.01 |
| Naphthalene | 4.09  |
| n-Butyl Alcohol | 0.03 |
| N-Hexane | 0.30 |
| Phenol | 1.88 |
| Styrene | 0.02  |
| Toluene | 0.54 |
| Xylene | 0.27 |
|  |  10.33  |

Non- VOC LAC 33:III. Chapter 51 Toxic Air Pollutants (TAPs):

|  |  |
| --- | --- |
| Pollutant | Emissions (TPY) |
| Antimony & Compounds |  0.003 |
| Arsenic & Compounds |  <0.001 |
| Barium & Compounds |  0.005 |
| Beryllium & Compounds |  <0.001 |
| Cadmium & Compounds |  0.001 |
| Chromium VI |  0.016 |
| Cobalt & Compounds  |  <0.001 |
| Copper & Compounds |  0.006 |
| Lead Compounds |  0.02 |
| Manganese & Compounds |  0.25 |
| Mercury & Compounds |  0.002 |
| Nickel & Compounds |  0.008 |
| Selenium & Compounds | <0.001 |
| Zinc & Compounds |  0.03 |

The Bradken-Amite, Facility is a major source of criteria pollutants, a minor source of HAPs, and a minor source of TAPs.

Permitted limits for individual emissions units and groups of emissions units, if applicable, are set forth in the tables of the proposed permit entitled “Emission Rates for Criteria Pollutants” and “Emission Rates for TAP/HAP & Other Pollutants.” These tables are part of the permit.

Emissions calculations can be found in Appendix B of the permit application. The calculations address the manufacturer’s specifications, fuel composition (e.g., sulfur content), emissions factors, and other assumptions on which the emissions limitations are based and have been reviewed by the permit writer for accuracy.

**General Condition XVII Activities**

 Very small emissions to the air resulting from routine operations that are predictable, expected, periodic, and quantifiable and that are submitted by the applicant and approved by the Air Permits Division are considered authorized discharges. These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. However, such emissions are considered when determining the facility’s potential to emit for evaluation of applicable requirements. Approved General Condition XVII activities are noted in Section VIII of the proposed permit.

##  **Insignificant Activities**

The emissions units or activities listed in Section IX of the proposed permit have been classified as insignificant pursuant to LAC 33:III.501.B.5. By such listing, the LDEQ exempts these sources or types of sources from the requirement to obtain a permit under LAC 33:III.Chapter 5. However, such emissions are considered when determining the facility’s potential to emit for evaluation of applicable requirements.

**VIII.** **REGULATORY APPLICABILITY**

Regulatory applicability is discussed in three sections of the proposed permit: Section X (Table 1), Section XI (Table 2), and Specific Requirements. Each is discussed in more detail below.

Section X (Table 1): Applicable Louisiana and Federal Air Quality Requirements

Section X (Table 1) summarizes all applicable federal and state regulations. In the matrix, a “1” represents a regulation applies to the emissions unit. A “1” is also used if the emissions unit is exempt from the emissions standards or control requirements of the regulation, but monitoring, recordkeeping, and/or reporting requirements apply.

A “2” is used to note that the regulation has requirements that would apply to the emissions unit, but the unit is exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified, or reconstructed since the regulation has been effective. If the specific criterion changes, the emissions unit will have to comply at a future date. Each “2” entry is explained in Section XI (Table 2).

A “3” signifies that the regulation applies to this general type of source (e.g., furnace, distillation column, boiler, fugitive emissions, etc.), but does not apply to the particular emissions unit. Each “3” entry is explained in Section XI (Table 2).

If blank, the regulation clearly does not apply to this type of emissions unit.

Section XI (Table 2): Explanation for Exemption Status or Non-Applicability of a Source

Section XI (Table 2) of the proposed permit provides explanation for either the exemption status or non-applicability of given federal or state regulation cited by 2 or 3 in the matrix presented in Section X (Table 1).

Specific Requirements

Applicable regulations, as well as any additional monitoring, recordkeeping, and reporting requirements necessary to demonstrate compliance with both the federal and state terms and conditions of the proposed permit, are provided in the “Specific Requirements” section. Any operating limitations (e.g., on hours of operation or throughput) are also set forth in this section. Associated with each Specific Requirement is a citation of the federal or state regulation upon which the authority to include that Specific Requirement is based.

**Federal Regulations**

 40 CFR 60 – New Source Performance Standards (NSPS)

No NSPS provisions are applicable to the Bradken-Amite Facility.

40 CFR 61 – National Emission Standards for Hazardous Air Pollutants (NESHAP)

No NESHAP provisions are applicable to the Bradken-Amite Facility.

 40 CFR 63 – Maximum Achievable Control Technology (MACT)

The following subparts are applicable at the Bradken-Amite Facility: A, and ZZZZZ. Applicable emission standards, monitoring, test methods and procedures, recordkeeping, and reporting requirements are summarized in the “Specific Requirements” section of the proposed permit.

Clean Air Act §112(g) or §112(j) – Case-By-Case MACT Determinations

A case-by-case MACT determination pursuant to §112(g) or §112(j) of the Clean Air Act was not required.

40 CFR 64 – Compliance Assurance Monitoring (CAM)

Per 40 CFR 64.2(a), CAM applies to each pollutant-specific emissions unit (PSEU) that 1) is subject to an emission limitation or standard, 2) uses a control devices to achieve compliance, and 3) has potential pre-control device emissions that are equal to or greater than 100 percent of the amount, in TPY, required for a source to be classified as a major source.

No emissions units are subject to CAM.

Acid Rain Program

The Acid Rain Program, 40 CFR Part 72 – 78, applies to the fossil fuel-fired combustion devices listed in Tables 1-3 of 40 CFR 73.10 and other utility units, unless a unit is determined not to be an affected unit pursuant to 40 CFR 72.6(b). LDEQ has incorporated the Acid Rain Program by reference at LAC 33:III.505. The Bradken-Amite Facility is not subject to the Acid Rain Program.

**SIP-Approved State Regulations**

Applicable state regulations are also noted in Section X (Table 1) of the proposed permit. Some state regulations have been approved by the U.S. Environmental Protection Agency (EPA) as part of Louisiana’s State Implementation Plan (SIP). These regulations are referred to as “SIP-approved” and are enforceable by both LDEQ and EPA. All LAC 33:III.501.C.6 citations are federally enforceable unless otherwise noted.

**State-Only Regulations**

Individual chapters or sections of LAC 33:III noted by an asterisk in Section X (Table 1) are designated “state-only” pursuant to 40 CFR 70.6(b)(2). Terms and conditions of the proposed permit citing these chapters or sections are not SIP-approved and are not subject to the requirements of 40 CFR Part 70. These terms and conditions are enforceable by LDEQ, but not EPA. All conditions not designated as “state-only” are presumed to be federally enforceable.

**IX. NEW SOURCE REVIEW (NSR)**

**Prevention of Significant Deterioration (PSD)**

The facility’s source category is not listed in Table A of the definition of “major stationary source” in LAC 33:III.509. As such, the PSD major source threshold is 250 TPY (of any regulated NSR pollutant).

The Bradken-Amite Facility is not classified as a major stationary source under the PSD program. Thus, PSD review is not required.

1. **Nonattainment New Source Review (NNSR)**

The Bradken-Amite Facility is located in an attainment area; therefore, NNSR does not apply.

1. **Notification of Federal Land Manager**

The Federal Land Manager (FLM) is responsible for evaluating a facility’s projected impact on the Air Quality Related Values (AQRV) (e.g., visibility, sulfur and nitrogen deposition, any special considerations concerning sensitive resources, etc.[[3]](#footnote-3)) and recommending that LDEQ either approve or disapprove the facility’s permit application based on anticipated impacts. The FLM also may suggest changes or conditions on a permit. However, LDEQ makes the final decision on permit issuance. The FLM also advises reviewing agencies and permit applicants about other FLM concerns, identifies AQRV and assessment parameters for permit applicants, and makes ambient monitoring recommendations.

If LDEQ receives a PSD or NNSR permit application for a facility that “may affect” a Class I area, the FLM charged with direct responsibility for managing these lands is notified.

In this instance there is no proposed project.

1. **Reasonable Possibility**

As previously mentioned there is no proposed project

**X. ADDITIONAL MONITORING AND TESTING REQUIREMENTS**

In addition to the monitoring and testing requirements set forth by applicable state and federal regulations (see Section VIII of this Statement of Basis), a number of “LAC 33:III.507.H.1.a” and/or “LAC 33:III.501.C.6” conditions may appear in the “Specific Requirements” section of the proposed permit. These conditions have been added where no applicable regulation exists or where an applicable regulation does not contain sufficient monitoring, recordkeeping, and/or reporting provisions to ensure compliance. LAC 33:III.507.H.1.a provisions, which may include recordkeeping requirements, are intended to fulfill Part 70 periodic monitoring obligations under 40 CFR 70.6(a)(3)(i)(B).

| ID | Description | Pollutant | Method | Frequency |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| EG-01 | Metal Melting and Refining | Particulate Matter | Visible Emissions | Daily |
| EU-01 | Casting Shakeout | Particulate Matter | Visible Emissions | Daily |
| EG-02 | Fresh Sand Handling and Blended Sand Silos | Particulate Matter | Visible Emissions | Daily |
| EG-05 | Casting Cleaning (Shot Blast) | Particulate Matter | Visible Emissions | Daily |
| EG-07 | Reclaim Sand System | Particulate Matter | Visible Emissions | Daily |

**XI. OPERATIONAL FLEXIBILITY**

Emissions Caps

An emissions cap is a permitting mechanism to limit allowable emissions of two or more emissions units below their collective potential to emit (PTE). The proposed permit does not establish an emissions cap.

 Alternative Operating Scenarios

 LAC 33:III.507.G.5 allows the owner or operator to operate under any operating scenario incorporated in the permit. Any reasonably anticipated alternative operating scenarios may be identified by the owner or operator through a permit application and included in the permit. The proposed permit does not include an alternative operating scenario.

Streamlined Requirements

When applicable requirements overlap or conflict, the permitting authority may choose to include in the permit the requirement that is determined to be most stringent or protective as detailed in EPA’s “White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program” (March 5, 1996). The overall objective is to determine the set of permit terms and conditions that will assure compliance with all applicable requirements for an emissions unit or group of emissions units so as to eliminate redundant or conflicting requirements. The proposed permit does not contain streamlined provisions.

**XII. PERMIT SHIELD**

A permit shield, as described in 40 CFR 70.6(f) and LAC 33:III.507.I, provides an “enforcement shield” which protects the facility from enforcement action for violations of applicable federal requirements. It is intended to protect the facility from liability for violations if the permit does not accurately reflect an applicable federal or federally enforceable requirement.

The proposed permit does not establish a permit shield.

**XIII. IMPACTS ON AMBIENT AIR**

 Emissions associated with the proposed Bradken-Amite Facility were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

**XIV. COMPLIANCE HISTORY AND CONSENT DECREES**

Bradken-Amite Inc. is proposing to operate the Bradken-Amite Facility. There are no enforcement actions pertaining the facility.

**XV. REQUIREMENTS THAT HAVE BEEN SATISFIED**

The following state and/or federal obligations have been satisfied and are therefore not included as Specific Requirements.

|  |  |  |
| --- | --- | --- |
| Source ID | Citation | Description |
|  |  |  |
| Entire Facility | 40 CFR 63.10880(f) | The facility was classified as a small foundry in January 2009.  |
|  |  |  |

**XVI. OTHER REQUIREMENTS**

Executive Order No. BJ 2008-7 directsall state agencies to administer their regulatory practices, programs, contracts, grants, and all other functions vested in them in a manner consistent with Louisiana’s Comprehensive Master Plan for a Sustainable Coast and public interest to the maximum extent possible. If a proposed facility or modification is located in the Coastal Zone, LDEQ requires the applicant to document whether or not a Coastal Use Permit is required, and if so, whether it has been obtained. Coastal Use Permits are issued by the Coastal Management Division of the Louisiana Department of Natural Resources (LDNR).

The facility is not located in the Coastal Zone; therefore, a Coastal Use Permit is not required.

**XVII. PUBLIC NOTICE/PUBLIC PARTICIPATION**

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to:

PPG Staff

LDEQ, Public Participation Group

P.O. Box 4313

Baton Rouge, Louisiana 70821-4313

Written comments and/or written requests must be received prior to the deadline specified in the public notice. If LDEQ finds a significant degree of public interest, a public hearing will be held.  All comments will be considered prior to a final permit decision.

LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The permit application, proposed permit, and this Statement of Basis are available for review at LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, Louisiana.  Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). Additional copies may be viewed at the local library identified in the public notice. The available information can also be accessed electronically via LDEQ’s Electronic Document Management System (EDMS) on LDEQ’s public website, www.deq.louisiana.gov.

Inquiries or requests for additional information regarding this permit action should be directed to the contact identified on page 1 of this Statement of Basis.

Persons wishing to be included on the public notice mailing list or for other public participation-related questions should contact LDEQ’s Public Participation Group at P.O. Box 4313, Baton Rouge, LA 70821-4313; by e-mail at maillistrequest@ldeq.org; or contact LDEQ’s Customer Service Center at (225) 219-LDEQ (219-5337). Alternatively, individuals may elect to receive public notices via e-mail by subscribing to LDEQ’s Public Notification List Service at http://www.doa.louisiana.gov/oes/listservpage/ ldeq\_pn\_listserv.htm.

Permit public notices can be viewed at LDEQ’s “Public Notices” webpage, http://www.deq.louisiana.gov/apps/pubNotice/default.asp. Electronic access to each proposed permit and Statement of Basis current on notice is also available on this page. General information related to public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

**APPENDIX A - ACRONYMS**

|  |  |
| --- | --- |
| AAS | Ambient Air Standard (LAC 33:III.Chapter 51) |
| AP-42 | EPA document number of the Compilation of Air Pollutant Emission Factors |
| BACT | Best Available Control Technology |
| BTU | British Thermal Units |
| CAA | Clean Air Act |
| CAAA | Clean Air Act Amendments |
| CAM | Compliance Assurance Monitoring, 40 CFR 64 |
| CEMS | Continuous Emission Monitoring System |
| CMS | Continuous Monitoring System |
| CO | Carbon monoxide |
| COMS | Continuous Opacity Monitoring System |
| CFR | Code of Federal Regulations |
| EI | Emissions Inventory (LAC 33:III.919) |
| EPA | (United States) Environmental Protection Agency |
| EIQ | Emission Inventory Questionnaire |
| ERC | Emission Reduction Credit |
| FR | Federal Register or Fixed Roof |
| H2S | Hydrogen sulfide |
| H2SO4 | Sulfuric acid |
| HAP | Hazardous Air Pollutants |
| Hg | Mercury |
| HON | Hazardous Organic NESHAP |
| IBR | Incorporation by Reference |
| LAER | Lowest Achievable Emission Rate |
| LDEQ | Louisiana Department of Environmental Quality |
| M | Thousand |
| MM | Million |
| MACT | Maximum Achievable Control Technology |
| MEK | Methyl ethyl ketone |
| MIK | Methyl isobutyl ketone |
| MSDS | Material Safety Data Sheet |
| MTBE | Methyl tert-butyl ether |
| NAAQS | National Ambient Air Quality Standards |
| NAICS | North American Industrial Classification System (replacement to SICC) |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| NMOC | Non-Methane Organic Compounds |

**APPENDIX A - ACRONYMS**

|  |  |
| --- | --- |
| NOx | Nitrogen Oxides |
| NNSR | Nonattainment New Source Review |
| NSPS | New Source Performance Standards |
| NSR | New Source Review |
| OEA | LDEQ Office of Environmental Assessment |
| OEC | LDEQ Office of Environmental Compliance |
| OES | LDEQ Office of Environmental Services |
| PM | Particulate Matter |
| PM10 | Particulate Matter less than 10 microns in nominal diameter |
| PM2.5 | Particulate Matter less than 2.5 microns in nominal diameter |
| ppm | parts per million |
| ppmv | parts per million by volume |
| ppmw | parts per million by weight |
| PSD | Prevention of Significant Deterioration |
| PTE | Potential to Emit |
| RACT | Reasonably Available Control Technology |
| RBLC | RACT-BACT-LAER Clearinghouse |
| RMP | Risk Management Plan (40 CFR 68) |
| SICC | Standard Industrial Classification Code |
| SIP | State Implementation Plan |
| SO2 | Sulfur Dioxide |
| SOCMI | Synthetic Organic Chemical Manufacturing Industry |
| TAP | Toxic Air Pollutants (LAC 33:III.Chapter 51) |
| TOC | Total Organic Compounds |
| TPY | Tons Per Year |
| TRS | Total Reduced Sulfur |
| TSP | Total Suspended Particulate |
| µg/m3 | Micrograms per Cubic Meter |
| UTM | Universal Transverse Mercator |
| VOC | Volatile Organic Compound |
| VOL | Volatile Organic Liquid |
| VRU | Vapor Recovery Unit |

##### APPENDIX B – GLOSSARY

*Best Available Control Technologies (BACT)* – an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this Part (Part III) which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

*CAM - Compliance Assurance Monitoring* – A federal air regulation under 40 CFR Part 64.

*Carbon Monoxide (CO)* – (Carbon monoxide) a colorless, odorless gas produced by incomplete combustion of any carbonaceous (gasoline, natural gas, coal, oil, etc.) material.

*Cooling Tower* – A cooling system used in industry to cool hot water (by partial evaporation) before reusing it as a coolant.

*Continuous Emission Monitoring System (CEMS)* – The total combined equipment and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent.

*Cyclone* – A control device that uses centrifugal force to separate particulate matter from the carrier gas stream.

*Federally Enforceable Specific Condition* – A federally enforceable specific condition written to limit the potential to Emit (PTE) of a source that is permanent, quantifiable, and practically enforceable. In order to meet these requirements, the draft permit containing the federally enforceable specific condition must be placed on public notice and include the following conditions:

* A clear statement of the operational limitation or condition which limits the source’s potential to emit;
* Recordkeeping requirements related to the operational limitation or condition;
* A requirement that these records be made available for inspection by LDEQ personnel;
* A requirement to report for the previous calendar year.

*Grandfathered Status* – those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

##### APPENDIX B – GLOSSARY

*Lowest Achievable Emission Rate (LAER)* – for any source, the more stringent rate of emissions based on the following:

a. the most stringent emissions limitation that is contained in the implementation plan of any state for such class or category of major stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

b. the most stringent emissions limitation that is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified major stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

*NESHAP* – National Emission Standards for Hazardous Air Pollutants – Air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63.

*Maximum Achievable Control Technology (MACT) –* the maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

*NSPS* – New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60.

*New Source Review (NSR) –* a preconstruction review and permitting program applicable to new or modified major stationary sources of criteria air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

*Nonattainment New Source Review (NNSR) –* a New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) set forth at 40 CFR Part 50. NNSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

*Organic Compound –* any compound of carbon and another element. Examples: methane (CH4), ethane (C2H6), carbon disulfide (CS2).

*Part 70 Operating Permit –* also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507.

##### APPENDIX B – GLOSSARY

*PM10 –* particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

*Potential to Emit (PTE) –* the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

*Prevention of Significant Deterioration (PSD) –* a New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

*Selective Catalytic Reduction (SCR)* – A non-combustion control technology that destroys NOX by injecting a reducing agent (e.g., ammonia) into the flue gas that, in the presence of a catalyst (e.g., vanadium, titanium, or zeolite), converts NOX into molecular nitrogen and water.

*Sulfur Dioxide (SO2)* – An oxide of sulphur.

*TAP* – LDEQ acronym for toxic air pollutants regulated under LAC 33 Part III, Chapter 51, Tables 1 through 3.

*“Top Down” Approach* – An approach which requires use of the most stringent control technology found to be technically feasible and appropriate based on environmental, energy, economic, and cost impacts.

*Title V permit –* see Part 70 Operating Permit.

*Volatile Organic Compound (VOC) –* any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the Administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

1. 40 CFR 70.7(a)(5) and LAC 33:III.531.A.4 require the permitting authority to “provide a statement that sets forth the legal and factual basis for the proposed permit conditions of any permit issued to a Part 70 source, including references to the applicable statutory or regulatory provisions.” [↑](#footnote-ref-1)
2. VOC and NOX are regulated as surrogates. [↑](#footnote-ref-2)
3. See http://www2.nature.nps.gov/air/Permits/ARIS/AQRV.cfm. [↑](#footnote-ref-3)