Special Conditions

Permit Numbers 5064 and N001

General Air Quality Requirements

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit. The annual rates are based on any consecutive 12-month period unless otherwise noted.

2. Current manufacturer's operating procedures shall be posted on (or near) the Lime Storage Silo (EPN 5), the Train I and Train II Incinerators (EPN E-4), the Boilers (EPNs B-1 and B-2), and the Water Pumps (EPNs G-1 and G-2) each or their respective control rooms, and operators and maintainers of each of these emission source units must be trained to operate the unit in accordance with those procedures.

3. As soon as possible after the occurrence of a spill or leak of a hazardous or odorous material, the material shall be immediately collected or contained, treated, or disposed of so as to minimize the emissions of air contaminants to the atmosphere. A log of all spills and leaks found at this plant shall be kept. The log shall include the date and time the leak or spill occurred and the date and time the leak or spill was repaired. The log should also include the name of the material.

4. The tank farm area and drum storage area must be properly maintained. The vapor control system serving the tank farm area must be kept in good working order and in operation at all times vapors are being emitted from the tank farm.

5. Good housekeeping practices shall be employed at all times. At no time shall the facility covered by this permit be operated in a manner that results in the creation of a nuisance condition. All containers shall be covered to minimize fugitive emissions.

Federal Applicability

6. These facility units shall also be operated in compliance with all applicable requirements relating to air quality in the Resource Conservation and Recovery Act (RCRA) and the rules promulgated thereunder, and in Title 30 Texas Administrative Code (30 TAC) Chapter 335, Subchapter F (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, and Disposal Facilities), promulgated by the Texas Commission on Environmental Quality (TCEQ) pursuant to the Solid Waste Disposal Act of the Texas Health and Safety Code, Chapter 361.

7. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):

   A. Subparts A - General Provisions;

   B. Subpart Kb - Volatile Organic Liquid Storage Vessels;

8. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61:

A. Subpart A - General Provisions;

B. Subpart C - National Emission Standard for Beryllium;

C. Subpart E - National Emission Standard for Mercury;

D. Subpart J - National Emission Standards for Equipment Leaks (Fugitive Emission Sources) of Benzene

E. Subpart M - National Emission Standards for Asbestos

F. Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources);

G. Subpart FF - National Emission Standard for Benzene Waste Operations;

9. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 63:

A. Subpart A - General Provisions;

B. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

C. Subpart DD – National Emission Standards for Hazardous Air Pollutants from Offsite Waste and Recovery Operations.

D. Subpart EEE - National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors;

E. Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

Boilers

10. Boilers EPNs B-1 and B-2 shall be fired with natural gas containing no more than 0.2 grains sulfur per 100 dscf natural gas. **(06/25)**

Scrubbers

11. For purposes of this permit the Lime Slack Scrubbers, EPNs LSS-1, LSS-2 and LSS-3 shall be subject to the following. **(06/25)**

A. Each scrubber shall operate with no visible emissions.

B. The differential pressure across each Lime Slack Scrubber shall be continuously monitored and be recorded at least once an hour. The pressure drop shall be maintained within the manufacturer's specifications.

C. The minimum liquid flow to the scrubbers shall be the manufacturers minimum design flow. The circulation rate shall be monitored and recorded at least once an hour.

The flow monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design value.

Quality assured (or valid) data must be generated when the scrubbers are operating except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, out-of-control operation, repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the scrubbers are operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

12. The water shall be one pass through the scrubber and wastewater shall be routed to the wastewater treatment plant authorized in TPDES Permit No. WQ0001429000. For the lime slack scrubbers, the air contaminants to be tested for include PM, PM_{10}, and $PM_{2.5}$ following the EPA Reference Method as specified in the table in this paragraph.

    A. EPA Reference Method 5 – Determination of Particulate Matter Emissions from Stationary Sources may be used instead of EPA Reference Method 201A/202. If the total particulate measured with EPA Reference Method 5 including the TCEQ back half analysis (TCEQ Method 23 – Particulate in Stack Gases with EPA Reference Method 202 weighing procedures) is less than 0.01 lb/hr, then particulate size distribution analysis is not required. When particle size distribution for PM_{10} and $PM_{2.5}$ is required, analysis of the particle size distribution on the filters and probe wash shall be conducted. Emissions measured in the back half will be assumed to be $PM_{2.5}$ or less. Emissions of PM_{10} and $PM_{2.5}$ will be assumed to equal their percentage of the mass fraction from the filter and probe wash size analysis plus the back half mass.

    B. If there are three identical vents, only one of the vents is required to be tested unless the emissions from a test (the average of the available sample runs for the test) are determined to be greater than or equal to the amount specified in the table in this paragraph. If the emissions determined from a specific test are greater than the limit in the table in this paragraph, then the identical vent shall be tested unless waived by the TCEQ Air Section Manager Region 12, Houston.

13. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from each scrubber (EPNs LSS-1, LSS-2, and LSS-3) to demonstrate compliance with the MAERT and Special Condition No. 12. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

    Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

    A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:

        (1) Proposed date for pretest meeting.

        (2) Date sampling will occur.

        (3) Name of firm conducting sampling.

        (4) Type of sampling equipment to be used.

        (5) Method or procedure to be used in sampling.

(6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.

(7) Minimum liquid flow and particulate concentration.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

B. Air contaminants emitted from the scrubbers (EPNs LSS-1, LSS-2 and LSS-3) to be tested for include (but are not limited to) PM, PM_{10} and $PM_{2.5}$.

C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after start-up of the facilities. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

D. The facility being sampled shall operate at the maximum production rates during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the maximum production rate is greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled “Chapter 14, Contents of Sampling Reports” of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.

One copy to each local air pollution control program.

Sampling ports and platform(s) shall be incorporated into the design of each scrubber (EPNs LSS-1, LSS-2 and LSS-3) according to the specifications set forth in the attachment entitled “Chapter 2, Guidelines for Stack Sampling Facilities” of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

Incinerator Performance Standards

14. For purposes of this permit, the incinerator trains shall be defined and referred to as follows:

A. Train I, which consists of a 3.6 meter BKMI Slagging Rotary Kiln (Kiln No. 1), and Afterburner No. 1 which is equipped with a Loddby liquids burner. The pollution control system for Train I (Scrubber System No. 1) consists of a Lurgi venturi saturator, dual packed tower condensers, a Calvert collision scrubber, a mist eliminator, a WESP, a 1,350-horsepower (hp) variable frequency-driven (VFD) induced draft (ID) fan, and a SCR De-NO_x system routed to the atmosphere through a new 100 foot stack, EPN E-4-I.

B. Train II, which consists of the 4.4 meter BKMI Slagging Rotary Kiln (Kiln No. 2), Rotary Reactor, and Afterburner No. 2. The pollution control system for Train II (Scrubber System No. 2) consists of a Lurgi venturi saturator, dual packed tower condensers, a Calvert collision scrubber, a mist eliminator, a WESP, a 1,350-hp VFD ID fan, and a SCR De-NO_x system routed to the atmosphere through a new 100-foot stack, EPN E-4-II.

15. The permittee shall maintain and operate the Train I and Train II Incinerators so that when operated in accordance with the operating conditions specified in this permit each train and sub train will meet the following performance standards:

A. A destruction and removal efficiency (DRE) of 99.99 percent for each principal organic hazardous constituent in each waste feed. The DRE shall be determined using the method specified in 40 CFR § 264.343(a).

B. Emissions of particulate matter (PM) not to exceed 34 mg/dsm3 corrected to 7 percent O_2.

C. Hydrogen chloride (HCl) emissions not to exceed 77 parts per million by volume (ppmv), combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent O_2.

D. Dioxin/Furans (D/F) emissions not to exceed 0.4 ng toxicity equivalent TCEQ/dscm corrected to 7 percent O_2 in the stack gas.

E. Ammonia concentration in the stack of each incinerator train shall not exceed 10 ppmv on a wet basis corrected to 7 percent O_2.

F. Mercury emissions are not to exceed 130 µg/dsm3 corrected to 7 percent O_2.

G. Lead, and cadmium combined emissions are not to exceed 240 µg/dsm3 corrected to 7 percent O_2.

H. Arsenic, beryllium, and chromium combined emissions are not to exceed 97 µg/dsm3 corrected to 7 percent O_2.

I. Compliance with the operating conditions specified in this permit and in the Industrial Solid Waste Management permit, Permit Number HW-50089, shall be regarded as compliance with the performance standards specified in this condition.

16. Visible emissions from the Incinerator Stacks for Trains I and II (EPNs E-4-I and E-4-II), not including uncombined water, shall not exceed an opacity of 5 percent averaged over a six minute period, except that visible emissions during the cleaning of a firebox, sootblowing, equipment changes, and ash removal may exceed this opacity limit for a period aggregating not more than 6 minutes in any 60 consecutive minutes nor more than 6 hours in any 10 day period.

17. In addition to the requirements specified in this permit, the two-train incinerator system shall operate in accordance with all applicable conditions of Industrial Solid Waste Management Permit Number HW-50089. Any deviation from or modification to Permit Number HW 50089 which would result in change or increase in air emissions or may conflict with a condition of this permit shall require notification to the Air Permits Division of the Texas Commission on Environmental Quality (TCEQ) prior to the deviation and may require a modification to this permit.

18. The bulk solids fed to the incinerator trains must be either containerized or handled in the Materials Processing Building, Enclosure Building, or its ancillary buildings which are to be certified “T” Enclosures per 40 CFR § 63.685(i)(1) and operate. Tanks T-201, T-638, T-1001-2, T-1001-2, and T-1001-3 are subject to the requirements of 40 CFR § 63.685(i)(1) for T-enclosures. The enclosures shall be monitored and maintained under negative pressure whenever bulk waste is present. Such

monitoring shall be conducted in accordance with 40 CFR § 52.741, Procedure T, section 5.4. This testing must be conducted at a minimum of once per quarter.

All enclosures shall vent to either of the incinerator trains. In the event that the incinerator trains are not operating, then the emissions must be vented to the existing carbon bed system. In the future, should T-1202 be used to containerize and repack waste containing VOC then this unit will must also comply with the provisions of 40 CFR § 63.685(i)(1).

Limitation on Wastes Incinerated

19. Pursuant to Special Condition No. 6 of this permit, the holder of this permit will operate according to an approved Waste Analysis Plan (WAP) required by Industrial Solid Waste Management Permit Number HW-50089. Compliance with the most recently approved WAP will be necessary for demonstrating continuous compliance with the feed rate limits and emissions authorized in this permit.

Incinerator Performance Testing Requirements

20. The following is the requirements for incinerator performance testing.

    A. The permittee will conduct analysis of the waste feed and sampling of the exhaust emissions to confirm that the waste feed composition is consistent with that represented in the permit application, the emissions from the incinerators are consistent with the limitations contained in this permit, and the performance standards of Special Condition No. 15 are met. All emissions sampling, testing, and procedures to establish proof of performance shall be executed by an independent laboratory or testing service acceptable to the Executive Director of the TCEQ. The TCEQ Executive Director, or designated representative, shall be afforded the opportunity to observe all such testing. The Executive Director of the TCEQ has the right to request additional testing. The permittee is responsible for providing sampling and analysis at his expense.

    B. All emissions testing required in these special conditions shall be coordinated with maximum available control technology (MACT) performance testing and/or testing required by Industrial Solid Waste Management Permit Number HW-50089.

    C. The appropriate TCEQ Regional Office shall be contacted no later than 60 days prior to sampling to schedule a pretest meeting. The purpose of the pretest meeting is to review the required sampling and testing procedures and protocol for submitting the test reports. Configuration of testing equipment and the exhaust stack will also be reviewed during the pretest meeting. The permit holder must employ the current TCEQ accepted sampling methods at the time of testing.

    D. Air contaminants to be tested for include (but are not limited to) NO_x, carbon monoxide, PM, total hydrocarbons, sulfur dioxide, chlorine, HCl, metals emissions authorized on the maximum allowable emission rates table (MAERT), polychlorinated biphenyls, and D/F.

    E. Pursuant to the D/F testing required in these special conditions, the following procedure will be used to report and comply with the D/F emission limits in Special Condition No. 15D. The D/F emissions shall be reported on a TCEQ basis speciated by congener both in lb/hr and ng/dscm corrected to 7 percent O_2. Congeners not detected should be noted as a non-detect and the method detection limit reported. For compliance with performance testing, the TCEQ concentration will be expressed as the sum of the products of the highest congener concentrations determined from the three individual runs and their toxic equivalency factors as displayed in 40 CFR Part 266 Appendix IX, Table 4.0-1.

F. The incinerator shall operate at normal production rate or operating condition levels during stack emission testing or at levels to be approved by the Executive Director of the TCEQ. Primary operating parameters that enable determination of incinerator rate shall be monitored and recorded during the stack test and shall be determined at the pretest meeting.

G. Copies of the final sampling report shall be forwarded to the TCEQ within 90 days after sampling is completed. Sampling reports shall comply with the provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Office of Air, Air Permits Division, Austin.

One copy to the TCEQ Houston Regional Office.

Incinerator Continuous Demonstration of Compliance

21. The permittee shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of NO_x from the Incinerator Stacks (EPNs E-4-I and E-4-II).

A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B or an acceptable alternative. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Permitting and Registration, Air Permits Division in Austin for requirements to be met.

B. The holder of this permit shall assure that the CEMS meets the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, or an acceptable alternative approved by the TCEQ. Each monitor shall be quality-assured at least quarterly using cylinder gas audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2, with the following exception: a relative accuracy test audit is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). Successive quarterly audits shall occur no closer than two months.

A log of relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3, any CEMS downtime, and all CGA exceedances of ±15 percent accuracy shall be kept on-site. Relative accuracy exceedances as defined above, any CEMS downtime, and all CGA exceedances of ±15 percent accuracy shall be reported quarterly to the TCEQ Houston Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the TCEQ Houston Regional Director.

C. The system shall be zeroed and spanned daily and corrective action taken when the 24 hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B.

D. The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate table in lb/hr at least once every day. The lb/hr data shall be summed on a monthly basis to tons per year (tpy) and used to determine compliance with the annual emissions limits of this permit. If the CEMS malfunctions, then the recorded concentrations may be reduced to units of the permit allowable as soon as practicable after the CEMS resumes normal operation.

E. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from the CEMS may be used to determine compliance with the allowable NO_x emission rates for the Incinerator Stack (EPN E-4).

F. The TCEQ Houston Regional Office shall be notified at least 30 days prior to any required relative accuracy test audits in order to provide them the opportunity to observe the testing.

Landfill Operations

22. The holder of this permit shall control excessive fugitive PM emissions from the landfill excavations and associated stockpiles by sprinkling with water and/or other appropriate dust suppressants as necessary.

23. If the landfill waste management operation produces any visible PM emissions which may be subject to wind dispersal, the owner or operator shall cover or otherwise manage the landfill so as to control emissions.

    A. Unpaved roads shall be sprinkled with water and/or other appropriate dust suppressants as necessary to achieve maximum control of dust emissions. Paved site roads shall be maintained as necessary to achieve maximum control of dust emissions.

    B. The beds of all trucks or open containers transporting bulk solid waste materials shall be covered as necessary to prevent wind dispersal of material being transported.

    C. Waste management vehicles on-site, entering, or exiting the landfill site shall be controlled to a 10-miles per hour speed limit by posting of signs and by visual monitoring to help control PM emissions from the landfill roads.

24. To maximize the containment of fugitive air contaminants, drummed or otherwise enveloped, waste material shall be managed and disposed of such that the continuity and integrity of each drum or envelope containing hazardous waste material is maintained. Containers which are intended for direct landfill disposal or storage shall not be punctured or treated in any manner such that the continuity or integrity of the container is breached.

25. All landfill wells for the leachate collection and removal sumps shall be equipped with removable, vapor-tight caps. Prior to removal of these caps, the permittee shall attach an air pump to the wells to evacuate three volumes of the airspace of the well before the cap is removed. The pump shall exhaust directly into a portable system of at least two carbon adsorption canisters in series or an alternative control device as approved by the Executive Director of the TCEQ.

26. The holder of this permit shall inspect the cap covering on all closed landfill cells and those of active and interim status landfill cells, upon closure, for cracks and/or erosion which may provide an emission point for air contaminants from the closed cells. The cap covering shall be properly maintained such that the integrity of the cap is preserved.

    A. The inspection of a closed landfill cell shall be conducted at a minimum once quarterly and shall continue through final and post-closure of the facilities.

    B. Records of the inspection and determinations as to the integrity of the cap covering a landfill cell shall be kept and maintained in the operating record at the plant site. Such records shall be made available for inspection by TCEQ personnel upon request. This information shall be kept through closure and post closure of these facilities.

Carbon Beds

27. The carbon beds shall not have a bypass.

28. Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

29. Emission Point Nos. (EPNs) E-1, E-2, E-3, and landfill well vents shall each vent through a carbon adsorption system (CAS) consisting of at least two activated carbon canisters that are connected in series. The EPN E-7 shall vent through a carbon adsorption system (CAS) consisting of at least three activated carbon canisters that are connected in series.

    A. Each CAS shall be sampled every 12 hours during intermittent service, or daily during continuous service to determine breakthrough of volatile organic compounds (VOC). The sampling point shall be at the outlet of the initial canister but before the inlet to the second or final polishing canister. Sampling shall be between the second and third canisters for EPN E-7. Sampling shall be done during loading (EPNs E-1, E-2, E-3, E-7) or process venting from landfill well vents.

    B. The VOC sampling and analysis shall be performed using an instrument with a flame ionization detector (FID), or a TCEQ-approved alternative detector. The instrument/FID must meet all requirements specified in Section 8.1 of EPA Method 21 (40 CFR 60, Appendix A). Sampling and analysis for VOC breakthrough shall be performed as follows:

        (1) Immediately prior to performing sampling, the instrument/FID shall be calibrated with zero and span calibration gas mixtures. Zero gas shall be certified to contain less than 0.1 ppmv total hydrocarbons. Span calibration gas shall be methane at a concentration within ± 10 percent of 100 ppmv, and certified by the manufacturer to be ± 2 percent accurate. Calibration error for the zero and span calibration gas checks must be less than ± 5 percent of the span calibration gas value before sampling may be conducted.

        (2) The sampling point shall be at the outlet of the initial canister but before the inlet to the second or final polishing canister. For EPN E-7, the sampling point shall be at the outlet of the second canister but before the inlet to the third or final polishing canister. Sample ports or connections must be designed such that air leakage into the sample port does not occur during sampling.

        (3) During sampling, data recording shall not begin until after two times the instrument response time. The VOC concentration shall be monitored for at least five minutes, recording one-minute averages, during loading (EPNs E-1, E-2, E-3, E-7) or process venting from landfill well vents.

    C. Breakthrough shall be defined as the highest 1 minute average measured VOC concentration at or exceeding 100 ppmv. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and the canister refilled with fresh activated carbon shall be placed as the new final polishing canister before the next loading instance (if intermittent) or 24 hours (if continuous). Sufficient new or regenerated activated carbon shall be maintained at the site to replace spent carbon such that replacements can be done in the above specified time frame.

    D. Records of the CAS monitoring maintained at the plant site, shall include (but are not limited to) the following:

        (1) Sample time and date.

        (2) Monitoring results (ppmv).

(3) Corrective action taken including the time and date of that action.

(4) Process operations occurring at the time of sampling.

E. Alternate monitoring or sampling requirements that are equivalent or better may be approved by the TCEQ Regional Manager or the TCEQ Regulatory Compliance Section Manager. Alternate requirements must be approved in writing before they can be used for compliance purposes.

Piping, Valves, Flanges, and Compressors in VOC Service - Intensive Directed Maintenance

30. The following requirements apply to the above-referenced equipment:

A. These conditions shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.05 pound per square inch, absolute at 20°C or (2) where operating pressure is at least 5 kilopascals (0.725 pound per square inch) below ambient pressure. Equipment excluded according to this special condition shall be identified in a list to be made available upon request by the TCEQ.

B. Construction of new and reworked piping, valves and pump and compressor systems shall conform to applicable American National Standards Institute, American Petroleum Institute, American Society of Mechanical Engineers or equivalent codes.

C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves shall be identified in a list to be made available upon request by the TCEQ.

E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring event after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Flanges shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel during walk-through. Each open-ended valve or line shall be equipped with a cap, blind flange, plug or a second valve. Leaks found during weekly walk-throughs shall be kept on the daily inspection log. The daily inspection log shall also include the dates and action taken to make repairs.

F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, bellows and diaphragm valves) and relief valves equipped with a rupture disc or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure gauge shall be installed between the relief valve and rupture discs to monitor disc integrity. A list of all relief valves equipped with a rupture disc shall be kept. This list shall be made available for review upon request by the TCEQ. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. A directed maintenance program shall consist simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained.

G. All new and replacement pumps and compressors shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need

not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control system kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic driven pumps) may be used to satisfy the requirements of this condition and need not be monitored. All other pump and compressor seals emitting VOC shall be monitored with an approved gas analyzer at least quarterly.

H. Damaged or leaking valves, flanges, compressor seals, and pump seals found to be emitting VOC in excess of 500 ppmv or found by visual inspection to be leaking (e.g., dripping liquids) shall be tagged and replaced or repaired. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If initial repair attempts are unsuccessful and the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. Maintain a list of all leaking components which cannot be repaired until a scheduled shutdown. The TCEQ Executive Director, at his discretion, may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.

I. The results of the required fugitive monitoring and maintenance program shall be made available to the TCEQ Executive Director or designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, and corrective actions taken. Records of flange inspections are not required unless a leak is detected.

J. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, and an applicable New Source Performance Standards or an applicable NESHAPS, and does not constitute approval of alternative standards for these regulations.

31. Audio, olfactory, and visual checks for NH_3 leakage shall be made daily within the operating area. Immediately, after detection of a leak, plant personnel shall take the following actions:

A. Identify the leak.

B. Commence repair, replacement, or other action in order to stop the leak. Repair may include the adjustment of bolts, fittings, packing glands, and pump/compressor seals as appropriate to control the leak.

C. If repair is not possible within four hours of identifying the leak, appropriate equipment shall begin to shut down until repair or replacement can be made.

D. Maintain a record of the date and time a NH_3 leak is detected, date and time of corrective actions, and date and time leak is repaired.

Storage Tanks and Loading Operations

32. Facilities subject to these requirements include RCRA permitted storage tanks, loading facilities, and associated sources of fugitive emissions handling hazardous wastes.

33. Filling of RCRA permitted storage tanks shall be accomplished by submerged fill pipes or equivalent technology that will minimize emissions.

34. All RCRA permitted storage tanks shall be equipped with a high level alarm.

35. The RCRA permitted storage tanks in the incinerator area shall be operated such that the tank vapors are not displaced or otherwise vented directly to the atmosphere. Tank vapors shall be vented to either the incinerator or CBA system.

36. The RCRA permitted storage tanks in the incinerator area shall be equipped with rupture disks.

37. When loading a tank truck, trailer, railcar, or marine vessel with hazardous liquids or vapors, any displaced hazardous vapors shall be disposed of in the incinerator or routed to the CBA system.

38. Except for individual cases that are approved by the TCEQ Executive Director, all transport vessels loading or unloading VOCs with a true vapor pressure greater than or equal to 0.5 pound per square inch absolute shall have been leak-tested within one year as required by the US Department of Transportation's regulation 49 CFR § 180.407(c) and as evidenced by a prominently displayed certification. In cases where the leak test could not be performed due to the transport vessel being filled prior to the test date, the provisions of 49 CFR § 180.407(a)(1) apply. In such a case the facility must maintain records documenting the date on which the filling process began.

Shredder Operation

39. The shredder shall only be used when the 4.4 meter kiln is operating. The exhaust vapors from the shredder shall be vented to the 4.4 meter kiln.

Lime Storage Silo Operation

40. Opacity of emissions from the Baghouse Exhaust (EPN-5) must not exceed 20 percent, averaged over a six-minute period, except for those periods described in 30 TAC § 111.111(a)(1)(E).

Fire Water Pumps

41. The total hours of operation for each of the north and south water pumps, designated as EPNs G-1 and G-2, shall not exceed 50 hours of testing per year per pump.

Additional Recordkeeping and Reporting Requirements

42. In order to demonstrate continuous compliance with: (a) the annual emission limits of permitted Engines (EPNs G-1, and G-2); and (b) the sulfur content of the diesel fuel oil, the holder of this permit shall record and maintain the following data:

    A. The number of hours of run time shall be recorded and totaled on a monthly basis.

    B. Records of sulfur-content analysis of all diesel fuel purchased as specified in Special Condition No. 39.

43. Information and data concerning the date, type and quantity of waste managed, waste analysis including metals concentrations, facility inspections, operating hours, sampling, and monitoring data if applicable, shall be maintained in the operating record at the plant site. The operating record shall be retained for at least three years following the date that the information or data is obtained.

44. Upon request, all records shall be made immediately available to representatives of the TCEQ or any local air pollution program having jurisdiction.

45. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the TCEQ or any air pollution control agency. In addition, the holder of this permit shall physically identify and mark by labeling in a conspicuous location, all equipment covered by this permit that has the potential of emitting air contaminants. The emission points shall be identified by labeling which corresponds to the EPN on the MAERT and the facility identification numbers submitted to the Emissions Inventory Section of the TCEQ.

46. All occurrences of noncomplying emissions and conditions must be logged and copies sent to the TCEQ Houston Regional Office. For the purpose of reporting, noncomplying emissions and conditions shall be defined as:

    A. Emissions in excess of those listed on the attached MAERT.

    B. Emissions from the baghouse exhaust which exceed 20 percent opacity averaged over a six minute period as specified in Special Condition No. 38.

    C. Operation of the facility covered by this permit in any manner that is inconsistent with, contradicts, or violates any or all of the conditions of this permit.

47. As long as noncomplying emissions and conditions have not occurred, reporting shall consist only of an annual letter to the TCEQ Houston Regional Office stating that no such conditions have occurred.

48. Maintain records of operating hours and abrasive material usage in the Abrasive Blast Cleaning area.

49. Maintain records of type and quantity of surface coatings used.

50. The following sources and/or activities are authorized under a Permit by Rule (PBR) by Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106). These lists are not intended to be all inclusive and can be altered without modifications to this permit.

Authorization	Source or Activity
PBR No. 159786	Authorizes the emissions from a wastewater storage tank (EPN: T-151) and an emergency generator (EPN: N-1).
PBR No. 162428	Authorizes Ammonium Nitrate emissions from a shredder (EPN: SHRDV).

Date: June 20, 2025