Special Conditions

Permit Number 19109

Emissions Standards

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.

2. The polyethylene powder exiting the product purge bin shall contain no more than 100 parts per million by weight (ppmw) of volatile organic compounds (VOC). Compliance with this requirement may be demonstrated using the average concentration obtained from multiple samples of the same product type collected within a 24-hour period. The polyethylene powder exiting the product purge bin shall contain no more than 80 ppmw VOC on an annual average.

The permit holder may perform operational tests and sampling of the polyethylene powder VOC emissions in order to characterize the influence of operating conditions on polymer residual VOC emissions. The above residual concentration limits do not apply during such testing. This operation for testing and sampling is subject to the following requirements and constraints:

A. Any testing must occur before December 31, 2004. The total operating hours in this mode shall not exceed 720.

B. The permit holder is still subject to all maximum allowable emission rates table (MAERT) limits during these periods.

C. The test periods shall be identified at least a week in advance.

D. At least one polymer sample shall be taken and analyzed per Special Condition No. 14 during each set of operating conditions. Recordkeeping for test events shall include: the date and time of each period, the polymer production rate, sampling results, and the changes made to operating conditions.

3. Particulate matter grain loading shall not exceed 0.01 grain per dry standard cubic foot (dscf) of air from any filter vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using U.S. Environmental Protection Agency (EPA) Test Method 22. **(7/16)**

4. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with the exception of those listed below:

Safety relief valves that discharge only as a result of fire or failure of utilities and those listed below (listed by equipment number and service):

Equipment No.	Service
R-1812-RV1	Tank 1355
R-1812-RV2	Tank 1355
L169RV9	Meter Yard
L169RV11	Meter Yard
R-3028	Meter Yard
R-3030	Meter Yard
R-3098	Meter Yard

Equipment No.	Service
819RV2	discharge of pump J819
819RV1	discharge of pump J819
R-714	discharge of pump J781
R-1105	discharge of pump J782
Q1R4001	Q1 RX Emergency Blowdown Vent
Q1TK5109	Product Purge Bin Vent

Federal Applicability

5. These facilities shall comply with all requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations Part 60 (40 CFR) Part 60, Subparts A, DDD, and VV on Standards of Performance for New Stationary Sources promulgated for VOC Emissions from the Polymer Manufacturing Industry and Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.

Operating Requirements

6. Flares shall be designed and operated in accordance with the following requirements:

A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.

B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.

C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Such operation shall be ensured by the use of steam assist to the flare.

D. The permit holder shall install a continuous flow monitor and composition analyzer that provide a record of the vent stream flow and composition to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.

The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be ±5.0%, temperature monitor shall be ±2.0 percent at absolute temperature, and pressure monitor shall be ±5.0 mm Hg;

Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR § 60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95 percent of the time when the flare is operational, averaged over a rolling 12-month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR § 60.18(f)(4) shall be recorded at least once every 15 minutes.

7. The Incinerator (Emission Point No. [EPN] Q1INC) shall:

A. Operate with no less than 99.9 percent efficiency in disposing of the carbon compounds captured by the collection system.

B. Be operated with a temperature in, or immediately downstream of, the combustion chamber maintained above 1462°F, and no less than that measured during the most recent satisfactory stack test performed in accordance with Special Condition No. 15. The temperature shall be continuously monitored and recorded when waste gas is directed to the incinerator. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ±0.75 percent of the temperature being measured expressed in degrees Celsius or ±2.5ºC

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

C. Be operated with an incinerator stack oxygen concentration of no less than that measured during the most recent satisfactory stack test performed to specifically establish this parameter in accordance with Special Condition No. 15.

D. The incinerator stack oxygen concentration shall be continuously monitored and recorded by October 1, 2005. Stack testing will be performed by November 30, 2005, to establish the appropriate incinerator oxygen concentration. Prior to the installation of the oxygen monitor, acceptable exhaust oxygen flow shall be ensured through the use of the safety interlock that requires that two blowers be operating during incinerator operations.

8. The oxygen analyzer used to satisfy Special Condition No. 7 shall continuously monitor and record oxygen concentration when waste gas is directed to the oxidizer. It shall reduce the oxygen readings to an averaging period of 6 minutes or less and record it at that frequency.

The oxygen analyzer used to satisfy Special Condition No. 7 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. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days. After completion of a satisfactory calibration drift test (i.e., drift not more than 5 percent of span value for six of seven days), the zero and span frequency may be extended to weekly.

The analyzer shall be quality-assured at least semiannually using cylinder gas audits (CGAs) 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., two successive semiannual CGAs may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive semiannual audits shall occur no closer than four months. After completion of two consecutive satisfactory semiannual CGAs, the permit holder may submit a request to perform this monitoring on a less frequent basis. This submission shall be in the form of a permit alteration request to the Air Permits Division of the TCEQ.

Necessary corrective action shall be taken for all CGA's that exceed ±15 percent accuracy and any continuous emissions monitoring system downtime in excess of 5 percent of the incinerator operating time. These occurrences and corrective actions shall be reported to the appropriate TCEQ Regional Director on a quarterly basis as needed. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

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

9. The filtered vents covered by this permit shall not operate unless filters and associated equipment are maintained in good working order and are operating properly during normal facility operations. The following steps shall be performed, at a minimum, to ensure proper operation of each filtered vent:

A. All filter vents shall be inspected for visible emissions once each day.

B. When there are visible emissions from any one filtered vent, the operation associated with that particular filtered vent shall be isolated and shut down in a timely and orderly manner. The isolated filter system shall be tested and inspected. Failed or damaged parts shall be repaired or replaced.

C. Spare filters shall be readily available for these facilities. If filters are not maintained on-site the permit holder shall be responsible for obtaining replacement parts as required for repair/replacement in a timely manner, not to exceed one business day.

D. The differential pressure across each filter vent shall be continuously monitored and be recorded at least once an hour. Minimum and maximum pressure drops for the following vents shall be as listed: **(7/16)**

EPN	Minimum Pressure Drop (inches water gauge)	Maximum Pressure Drop (inches water gauge)
Q1F01426	0.2	10
Q1F15003	0.2	10
Q1F15004	0.2	10
Q1FEEDVB	0.2	10
Q1FEEDVC	0.2	10

Each 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 0.5 inches water gauge pressure or 0.5 percent of span.

Quality assured (or valid) data must be generated when the above listed vents 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 (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that each of the above listed facilities operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

E. Records shall be maintained of all inspections and maintenance performed.

F. Special Condition No. 9D shall become effective for EPN vents Q1F01426, Q1F15003, Q1F15004, Q1FEEDVB, and Q1FEEDVC no later than December 31, 2016. **(7/16)**

10. This permit authorizes emissions from the Flare (EPN HSFLARE) and EPN QIR4001 for start-ups, shutdowns, and degassing associated with the following activities:

Replacement of comonomer dryers material, acetylene removal material, ethylene deox unit material, ethylene carbon dioxide removal unit material, and ethylene dryer material.

These emissions are subject to the maximum allowable emission rates indicated on the MAERT. Any maintenance, start-up, and shutdown activities not in the above list are not authorized by this permit. In normal process material regeneration, loading/unloading, and other intermittent operations as identified in Equistar letter dated June 12, 2003, are not considered maintenance but are authorized by this permit. The permit holder shall document each of these activities and estimate actual emissions associated with each. The rolling 12-month emissions due to these activities shall be updated monthly. Each monthly emission update shall be completed before the end of the next calendar month.

11. The VOC associated with cooling tower EPN Q1CT water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate, and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12 month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.

12. For the cooling tower EPN Q1CT shall be operated and monitored in accordance with the following:

A. Cooling towers shall each be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.

B. Total dissolved solids (TDS) shall not exceed 3000 parts per million by weight (ppmw). Dissolved solids in the cooling water drift are considered to be emitted as PM, PM_{10}, and $PM_{2.5}$ as represented in the permit application calculations.

C. Cooling towers shall be analyzed for particulate emissions using one of the following methods:

(1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or

(2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per µmho/cm or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or

(3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using C(2) above provided the highest ratio is not more than 10% larger than the smallest ratio; or

(4) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.

D. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.

(1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.

(2) The analysis method for conductivity shall be either ASTM D1125-95A (field or routine laboratory testing) or ASTM D1125-95B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.

(3) Alternate sampling and analysis methods may be used to comply with D1 and D2 with written approval from the TCEQ Regional Director.

(4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.

E. Emission rates of PM, PM_{10} and $PM_{2.5}$ shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

Fugitive Emission Monitoring

13. Piping, Valves, Connectors, Pumps, Agitators, and Compressors in VOC Service - 28VHP

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

A. The requirements of paragraphs F and G shall not apply (1) where the Volatile Organic Compound (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

(1) piping and instrumentation diagram (PID);

(2) a written or electronic database or electronic file;

(3) color coding;

(4) a form of weatherproof identification; or

(5) designation of exempted process unit boundaries.

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

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

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. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an unsafe-to-monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe-to-monitor times. A difficult-to-monitor component for which quarterly monitoring is specified may instead be monitored annually.

E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both

valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

(1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or

(2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once within the 72 hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. If a relief valve is equipped with rupture disc, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

Replacements for leaking components shall be re-monitored within 15 days of being placed back into VOC service.

G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects

emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems 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.

H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.

I. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, 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 within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.

K. Alternative monitoring frequency schedules of 30 TAC §§ 115.352 - 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.

L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

Sampling and Testing

14. The holder of this permit shall perform monthly sampling and testing for residual VOC and other testing, as required, to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the polyethylene powder as it exits the product purge bin and to verify compliance with Special Condition No. 2.

The method to be used for residual VOC testing shall be the "Septum Bottle Method for Determining Residual VOC in Polyethylene" submitted with correspondence dated December 5, 2003, or another test method approved by the TCEQ Regional Office. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

The VOC emissions from the Polymer Pellet Handling Systems (EPN Q1F01324) will be determined by calculation using the monthly production rate and the monthly average sampling results determined using the above method. At least one sample of each product type produced shall be taken each month.

Polymer production rates and sampling records will be maintained. The compliance records will include:

A. Date and time of sample.

B. Actual plant production rate at the time of sampling.

C. Product number.

D. Measured total VOC concentration of polymer.

E. Polymer handling emissions will be calculated by the VOC concentration multiplied by monthly production of that product type. Calculations will take into account any changes in product type during the month.

15. The holder of this permit 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 the incinerator. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

A. The TCEQ Houston Regional Office shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

(1) 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.

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 submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

Requests to waive testing for any pollutant specified in B of this condition shall be submitted to the TCEQ Office Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have the EPA approval shall be submitted to the TCEQ Regional Office.

B. Air contaminants emitted from the incinerator to be tested for include (but are not limited to) VOC, nitrogen oxides, and carbon monoxide.

C. Sampling shall occur within 60 days after initial start-up of the facilities, within 180 days of increasing hourly polymer production to greater than 110 percent of that maintained during the last satisfactory stack test performed in accordance with this condition, and at such other times as may be required by the Executive Director of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires the EPA approval, and requests shall be submitted to the TCEQ Regional Office.

D. The plant shall be operated so as to provide maximum waste gas feed to the incinerator during stack emission testing. Primary operating parameters that enable determination of waste gas feed rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting. Any additional parameters 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. If the plant is unable to operate at maximum waste gas feed rates during testing, then future rates may be limited to the rates established during testing. Additional stack testing may be required when higher rates are achieved.

E. Three copies of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Houston Regional Office.

One copy to the appropriate air pollution control programs.

F. Stack sampling shall be repeated every five years in accordance with paragraphs A, B, and D of this condition.

Compliance Assurance Monitoring

16. The following requirements apply to VOC capture systems for control devices EPNs Q1INC and HSFLARE.

A. Inspections of VOC capture systems associated with each control device shall be conducted per the 28 VHP fugitive monitoring program in Special Condition 13.

B. Each control device shall not have a bypass.

or

If there is a bypass for a control device, comply with either of the following requirements:

(1) Install an indicator that records and verifies zero flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or

(2) Once a month, inspect the valves, verifying that the position of the valves and the condition of the car seals prevent flow out the bypass.

A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service.

C. Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

17. The following requirements apply to capture systems for EPNs Q1F01426, Q1F15003, Q1F15004, Q1FEEDVB, and Q1FEEDVC. **(7/16)**

A. If used for particulate control, complete either of the following once a year

(1) Inspect any fan and verify proper operation and inspect the capture system to verify there are no cracks, holes, tears, and other defects; or

(2) Verify there are no fugitive emissions escaping from the capture system by performing a visible emissions observation for a period of at least six minutes in accordance with 40 CFR Part 60, Appendix A, Test Method 22.

B. The control device shall not have a bypass.

or

If there is a bypass for the control device, comply with either of the following requirements:

(1) Install a flow indicator that records and verifies zero flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or

(2) Once a month, inspect the valves, verifying that the position of the valves and the condition of the car seals prevent flow out the bypass.

A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service.

C. Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

D. Special Condition No. 17B(1) and (2) shall become effective for EPN vents Q1F01426, Q1F15003, Q1F15004, Q1FEEDVB, and Q1FEEDVC no later than December 31, 2016.

Date: July 26, 2016