

**Texas Commission on Environmental Quality  
Air Permits Division**

**New Source Review (NSR) Boilerplate Special Conditions**

This information is maintained by the Chemical NSR Section and is subject to change. Last update was made **August 2011**. These special conditions represent current NSR boilerplate guidelines and are provided for informational purposes only. The special conditions for any permit or amendment are subject to change through TCEQ case by case evaluation procedures [30 TAC 116.111(a)]. Please contact the appropriate Chemical NSR Section management if there are questions related to the boilerplate guidelines.

Polyethylene/polypropylene      All (A)

(A) Production      Annual production from the permitted unit will not exceed (#) million (MM) pounds per year. *(remove production limit if requested by applicant)* The facility will produce copolymers and homopolymers to the hourly throughput constraints contained in the Table 2 submitted with application form PI-1 dated *(date)*. Production records shall be updated monthly with the pounds of each type of polymer produced during the previous month and rolling 12 months to date.

(A) 32M

(A) BACT      Total VOC emitted to the atmosphere after the extruder through product load out (includes EPNs *extruder/dryer and silo*) shall not exceed 80 pounds of VOC/million (MM) pounds of high density polyethylene *(or polypropylene)* pellets.

(A) Control device      *flare or oxidizer*

(A) Cooling water      *cooling water*

(A) PM BACT      Particulate matter grain loading shall not exceed 0.01 grains per dscf of air from any 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.

(A) PM control      The filtered vents covered by this permit shall not operate unless filters and associated equipment are maintained in good working order and operating. All filter vents will be inspected for visible emissions once per day and a spare-parts filter inventory will be maintained on site. Records shall be maintained of all inspections and maintenance performed.

(A) Fugitives      For piping components, see fugitive control requirements.

(A) Stack sampling *Stack sampling on vents required by NSPS DDD, also generally dryers, and any other significant downstream vents. These results should be compared with those from the head space test. Also as appropriate for thermal oxidizer.*

(A) Periodic sampling Ongoing compliance with VOC emission limits for the polyethylene (or polypropylene) pellet handling systems between each extruder and product load out (inclusive) will be determined by calculation using monthly production rates and monthly average sampling and testing of the polyethylene for residual VOC at the following two locations: (A) immediately after (or before) the pellet extruder and (B) at final product loading. A VOC head space test approved by the TCEQ Compliance Support Division shall be used to determine the residual VOC. Monthly average sampling will be based on a minimum of three samples. Separate samples are required for each product type produced during the month. (one sample point at the extruder may be preferable if the test method is designed for that)

*Ideally the sample would be taken right before the first uncontrolled emission point. This might be accomplished with a sample of the powder that is fed into the extruder (although the resulting emissions from the powder may exceed those that occur from the pellets). If that is not possible or practical, the first available sample spot downstream of the extruder may be at the dryer. If that is the case, a stack sample should be performed of those emission points between the extruder and the sample point to confirm that those emissions are properly accounted for.*

Polymer production rates and monitoring records will be maintained at the plant site and will include (but are limited to):

- A. Day and time of sample.
- B. Actual plant production rate at the time of sampling and monthly production rate.
- C. Product number and melt index.
- D. Polymer handling emissions will be calculated by concentration (A) - concentration (B) multiplied by (monthly production) (or simply the concentration \* production rate if only one sample is required)

(a) Tanks

(a) SSM