

*****Advanced Approvals*****

Saturn Corporation, Spring Hill Tennessee (Automobile Manufacturing industry)

- changes to existing emissions source, construction of new sources (conditional)
- BACT for all existing emissions units; case by case BACT for new units.

Process Description:

Emissions Monitoring Technique:

Emissions Calculation:

Pollutant Control Technique:

Process Description: The Saturn flexible permit includes Advance-approvals for certain types of emission sources. Permit language specifying “Pre-approved New Source Review” from Section E7 of the permit is given below.

E7 Pre-approved New Source Review

E7-1 For emission sources identified in E3, Saturn is authorized to undertake any physical change or change in the method of operation, provided that the emissions from the facility do not exceed emissions limitations in E5 of this permit and Saturn continues to use the control technology inherent in the E5 PALs and identified in Tables 1, 2, 3, and 4 of Attachment 1, or alternative control technology (including pollution prevention and alternative configurations) agreed to by TDEC. [Note: Tables 1, 2, 3, and 4 of Attachment 1 included with example PAL, PSEL language.]

E7-2 Saturn can undertake the addition of new emission sources provided that PAL emission levels are not exceeded and the following additional conditions are met:

- a) New emission sources with a PTE greater than the ton per year levels identified in Table 5 of Attachment 1 of this permit shall be registered with TDEC and shall apply best available control technology (BACT), as approved by TDEC. TDEC must approve or deny the BACT analysis within 45 days of the registration date. The Technical Secretary will provide public notice of such changes as part of the Title V administrative permit amendment process.
- b) The registration shall include appropriate application forms, a brief process description, documentation of BACT as required and periodic monitoring parameters for any control equipment [Note: Table 5 of Attachment 1 included with example PAL, PSEL language.]

E7-3 New emission sources with a potential to emit (PTE) less than the ton per year levels identified in Table 5 of Attachment 1 of this permit shall be registered with TDEC and shall apply minor source best available control technology (mBACT), as approved by TDEC. TDEC must approve or deny the mBACT analysis within 30 days of the registration date.

E7-4 mBACT is defined as any combination of work practices, raw material specifications, source design characteristics, or air pollution control devices for new emissions units that are typical of the emission level achieved by well controlled new or modified sources similar in type and size to the new emissions unit.

E7-5 The registration shall include, appropriate application forms, a brief process description, documentation of mBACT as required, and periodic monitoring parameters for any control equipment.

E7-6 The application of mBACT shall ensure that the new source meets all applicable air quality emissions standards and other emission limits as appropriate.

E7-7 Emissions from any new source (excluding minor sources) shall not cause or contribute to an exceedance of any National Ambient Air Quality Standard (NAAQS) or Prevention of Significant Deterioration (PSD) increment.

Emissions Monitoring Technique: See Section B “General Conditions for Monitoring, Reporting, and Enforcement” and Attachment 2 “Pollution Control Device Monitoring Protocols for Saturn” in the complete Saturn permit. Attachment 2 contains detailed monitoring protocols for fabric/cartridge filters (2A), oil mist eliminators (2B), thermal oxidizers (2C and 2D), carbon abatement systems (2E), waterwash paint booths (2F), and dry paint filters (2H).

Emissions Calculation: See Tables 1 – 4: “Summary of VOC (Table 1), PM (Table 2), NO_X/SO₂ (Table 3), CO (Table 4) Emissions Sources, Control Technology Requirements, and Proposed Emission Rate Calculation Methods” in the Plant-wide Emission Limits (PAL, PSEL) section of this document.

Pollutant Control Technique: See Tables 1 – 4: “Summary of VOC (Table 1), PM (Table 2), NO_X/SO₂ (Table 3), CO (Table 4) Emissions Sources, Control Technology Requirements, and Proposed Emission Rate Calculation Methods” in the Plant-wide Emission Limits (PAL, PSEL) section of this document.