

ATTACHMENT A

SUMMARY OF PROPOSED AMENDMENTS TO BACT GUIDELINES

The following summarizes the key proposed amendments to the BACT Guidelines:

Overview

Chapter 3 – When is BACT Required?

- Adding the complete names of Class I- Group III substances (ozone-depleting compound) to Table 2.

Chapter 5 - Review of Staff BACT Determinations

- Updating the name of two divisions; Legislative, Public Affairs/Media Office and Engineering & Permitting.

Consistent with new guidelines regarding South Coast AQMD's branding, all "District" and "SCAQMD" references in the BACT Guidelines are proposed to be changed to "South Coast AQMD" throughout the guidelines.

Part A

Chapter 1 – How is LAER Determined for Major Polluting Facilities?

- Listing volatile organic compound (VOC), one of the principle precursor gases that contribute to secondary PM_{2.5}.

Chapter 2 – How to Use Part B of the BACT Guidelines

- Updating the listing information based on the LAER/BACT determination forms.

Part B

New Section I Listings

- ⇒ Regenerative Thermal Oxidizer {30 ppm NO_x and 100 ppm CO corrected to 3 percent O₂}
- ⇒ Recuperative Thermal Oxidizer {30 ppm NO_x and 250 ppm CO corrected to 3 percent O₂}
- ⇒ Flare (Thermal Oxidizer) - Liquid Transfer and Handling Marine Loading {30 ppm NO_x and 10 ppm CO corrected to 3 percent O₂}
- ⇒ Process Heater – Non-Refinery; Thermal Fluid Heater {9 ppm NO_x and 100 ppm CO corrected to 3 percent O₂}
- ⇒ I.C. Engine – Stationary - Non-Emergency- Electrical Generation with NSCR – Natural Gas {NO_x, VOC and CO limits of 0.07 lb/MW-hr (2.5 ppmvd), 0.10 lb/MW-hr (10 ppmvd) and 0.20 lb/MW-hr (12 ppmvd), respectively, corrected to 15 percent O₂}
- ⇒ Duct Burner – Refinery Fuel Gas {40 ppm total reduced sulfur, rolling 1-hr average period and 30 ppm total reduced sulfur, rolling 24-hr average period}
- ⇒ Aluminum Heat Treating Oven 5.47 MM Btu/hr - Billet Temp. < 970°F {25 ppm NO_x corrected to 3 percent O₂}

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Updates to Section I

- ⇒ Simple Cycle Gas Turbines - Natural Gas {2.3 ppm NO_x and 4 ppm CO corrected to 15 percent O₂}

Part C

Chapter 1 – How is MSBACT Determined for Minor Polluting Facilities?

- Updating the Maximum Cost-Effectiveness Values on Table 5 consistent with the 3rd quarter 2020 Marshall and Swift equipment index.

Part D

New MSBACT Listing

- ⇒ Fermentation, Wine - closed tanks ≤30,000 gallons {Venting to water scrubber or chiller condenser with min 67 percent overall control efficiency averaged over the fermentation season}
- ⇒ Thermal Oxidizer (Afterburner), Regenerative Thermal Oxidizer – Natural Gas Fired {30 ppm NO_x and 400 ppm CO corrected to 3 percent O₂}

Updated MSBACT Listings

- ⇒ Coffee Roasting {Correction - Rule 1147 does not apply: remove NO_x requirements for consistency and adding a footnote to refer to Thermal Oxidizer BACT requirement for NO_x emissions from oxidizer}.
- ⇒ Fish Reduction {Correction - Rule 1147 does not apply: remove NO_x requirements for consistency}
- ⇒ Flare {Compliance with Rule 1118.1. - include “Produced Gas”, “Organic Liquid Storage”, “Organic Liquid Loading”, and “Other Flare Gas” subcategories to the listing to maintain consistency with Rule 1118.1}
 - Produced Gas, Digester Gas, and Landfill Gas hazardous and non-hazardous waste {Clarification - compliance with Rule 1118.1 for VOC, NO_x and CO}
 - Organic Liquid Storage and Loading {Clarification - compliance with Rule 1118.1 for NO_x and CO}
 - Other Flare Gas {Clarification - compliance with Rule 1118.1 for NO_x}
- ⇒ Gas Turbine {Clarification - add “with add-on controls” to be consistent with similar requirements for inorganic pollutants from a control device}
- ⇒ Glass Screen Printing – Flat Glass {Include Flat Glass Screen Printing category with the use of Rule 1145 compliant UV/EB or water-based inks as optional minor source BACT compliance method}
- ⇒ I.C. Engines {Correction - add “6-6-2003 Rev. 1” to I.C. Engine, Portable Category (Rule 431.2)}
- ⇒ Open Process Tanks: Chemical Milling (Etching) and Plating {Clarification - create “Open Process Tanks” category and move current “Chemical Milling Tanks” and “Chrome plating” categories to this category}

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- Chrome plating { *Correction - change “Chrome plating” to “Plating” in order to generalize the application. Update PM10 BACT requirement by changing “Packed Scrubber and Mist Suppressant” requirements to “Compliance with Rule 1469”* }
- ⇒ Polyester Resin Operations { *Merge “Polyester Resin Operations - Molding and Casting” with “Fiberglass Operations” and rename the category to “Polyester Resin Operations”* }
- ⇒ Powder Coating Booth { *Remove “Powder Recovery System with a Cyclone” for clarification and correct the throughput limit to ≤ 37 lbs/day and > 37 lbs/day* }
- ⇒ Printing (Graphic Arts)
 - Flexographic { *Clarification - replace “control” with “alternatively” for an alternative control method and “afterburner” with “thermal oxidizer”* }
 - “Flexographic” and “Lithographic or Offset, Heatset” { *Clarification - replace “Compliance with SCAQMD Rule 1147” with “Compliance with Thermal Oxidizer BACT requirements” for NO_x and add “Compliance with Thermal Oxidizer BACT requirements” for CO* }
- ⇒ Spray Booth { *Clarification - replace “Automotive” with “Fully Enclosed”. Add “Compliance with Rule 1147 if booth has a Make-up Air Unit or a Heater”* }
 - Automotive, down-draft type > 22 lb/day of VOC Emissions { *Correction - define “Super Compliant Materials” as any material containing 50 grams or less of VOC per liter of material* }
 - Enclosed with Automated Spray Nozzles for Wood Cabinet { *Add a new subcategory and a VOC BACT requirement of “Compliance with Rule 1136 or use of Rule 1136 compliant UV/EB or water-based coatings” to control VOC emissions* }
- ⇒ Thermal Oxidizer (Afterburner), Catalytic Oxidizer – Natural Gas Fired { *Change the title to “Thermal Oxidizer (Afterburner, Regenerative Thermal Oxidizer, and Thermal Recuperative Oxidizer), and Catalytic Oxidizer – Natural Gas Fired”, add “Regenerative Thermal Oxidizer” as well as NO_x and CO requirements as a separate subcategory and keep the current BACT requirements under subcategory “Other Types”* }

Part E

Consistent with new guidelines regarding South Coast AQMD’s branding, all “District” and “SCAQMD” references in the BACT Guidelines are proposed to be changed to “South Coast AQMD”.