

**SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT**

STAFF REPORT

**Proposed Negative Declarations for
Control Techniques Guidelines**

Automobile and Light-Duty Truck Assembly Coatings

Fiberglass Boat Manufacturing Materials

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BACKGROUND

The District is designated as a severe nonattainment area for the federal 8-hour ozone standard. The Federal Clean Air Act (CAA) specifies that State Implementation Plans (SIPs) for nonattainment areas must include “reasonably available control measures” (RACM), including “reasonably available control technology” (RACT), for sources of emissions¹. The CAA also provides that for nonattainment areas classified as “moderate” or worse, states must revise their SIPs to include RACT for sources of VOC emissions for each category of VOC sources covered by all Control Techniques Guidelines (CTG) documents issued after November 15, 1990, and prior to the area’s date of attainment². EPA defines RACT as “the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility³.” EPA periodically publishes information regarding available controls⁴. In developing CTG documents, EPA evaluates, among other things, the sources of VOC emissions and the available control approaches for addressing these emissions, including the costs of such approaches. CTG documents establish the presumptive minimum recommendations for RACT. Areas may deviate from CTG requirements, if justified.

As an alternative to adopting a RACT rule, a state or local agency may adopt a negative declaration documenting that it has no stationary sources or emitting facilities to which the CTG is applicable. The negative declaration must go through the same public review requirements as any other SIP submittal^{5,6}. The negative declarations become part of California’s State Implementation Plan at Title 40 of the Code of Federal Regulations (CFR) Part 52, Section 52.222. The Board has previously adopted negative declarations for 23 source categories.

SUMMARY

There are no sources within the District to which the 2008 CTGs for Automobile and Light-Duty Truck Assembly Coatings and Fiberglass Boat Manufacturing Materials are applicable. The purpose of this staff report is to provide sufficient analysis to support the adoption of negative declarations for these two CTGs.

CTG CATEGORIES

This analysis addresses two CTG documents for source categories in which the District has no sources: Automobile and Light-Duty Truck Assembly Coatings, and Fiberglass Boat Manufacturing Materials.

Staff’s evaluation process included, for each CTG source category, an analysis of the CTG applicability, a review of District permitting records, and the emission inventory for the District’s Clean Air Plan. Business listings and yellow pages were searched to identify any unpermitted

¹ Clean Air Act § 172(c)(1)

² Clean Air Act § 182(b)(2)(A)

³ Federal Register Notice 44 FR 53761, September 17, 1979

⁴ Clean Air Act §§ 108(b) and (c)

⁵ Clean Air Act §110

⁶ Title 40 Code of Federal Regulations §51.102

sources. The following sections describe each of the CTGs and evaluations of their applicability to sources in the District.

Automobile and Light-Duty Truck Assembly Coatings

Title: Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings.

Reference: U.S. EPA Publication No. EPA-453/R-08-006, September 2008.

The CTG applies to automobile and light-duty truck assembly coating operations. The source category includes the coatings that are applied to new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks. These coatings are applied at automobile or light-duty truck assembly plants. The large majority of these coatings are specifically formulated, marketed and sold for this purpose.

The CTG recommends the following VOC reduction measures: VOC emission limits for coating operations; work practices for storage and handling of coatings, thinners, and coating waste materials; and work practices for the handling and use of cleaning materials.

Staff searched the District permitting database for automotive assembly operations and found no active permits. Furthermore, Staff searched online for information about automobile manufacturing in California. The only remaining facility in California is in Fremont. New United Motor Manufacturing Inc. (NUMMI) operated there until it closed in early 2010. The facility reopened in October 2010 as a manufacturing facility for Tesla Motors, Inc. There are no automobile or light-duty truck assembly facilities within the District and none are expected in the near future. A negative declaration is proposed for this source category.

Fiberglass Boat Manufacturing

Title: Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials.

Reference: U.S. EPA Publication No. EPA-453/R-08-004, September 2008.

The CTG applies to each fiberglass boat manufacturing facility that manufactures hulls or decks of boats from fiberglass or builds molds to make fiberglass boat hulls or decks and emits 2.7 tons or more of VOC per year. The source category does not include facilities that manufacture solely parts of boats (such as hatches, seats, or lockers), or boat trailers, but do not manufacture hulls or decks of boats from fiberglass, or build molds to make fiberglass boat hulls or decks.

The CTG recommends control of the following:

- Open molding operations, including pigmented gel coat, clear gel coat, production resin, tooling resin, and tooling gel coat;
- Closed molding resin operations;
- Resin and gel coat application equipment cleaning;
- Resin and gel coat mixing operations.

The CTG controls do not include surface coatings applied to fiberglass boats nor to industrial

adhesives used in the assembly of fiberglass boats. However, polyester resin putties are not considered to be adhesives and are included in the CTG. The CTG does not apply to boat repair operations, only to the manufacture of new fiberglass hulls or decks.

The CTG recommends the following VOC reduction measures: VOC content limits for resins, gel coats, and cleaning solvents; application methods for resins and gel coats; work practices for storage and handling of coatings, thinners, and coating waste materials; and work practices for the handling and use of cleaning materials.

Staff searched the District permitting database and found no active permits for fiberglass boat manufacturing facilities. Staff searched yellow pages for fiberglass boat manufacturing facilities and repair shops. Staff also searched online using terms such as "fiberglass boat manufacturing", "fiberglass boat", "boat manufacturing" and "custom boats" in the Sacramento area. Several boat repair facilities were identified, but only two facilities that potentially manufacture fiberglass boats were identified: Classic Marine, located on Folsom Boulevard in Sacramento, and Whitcat, located in Rancho Cordova at the California State University, Sacramento Aquatic Center. Staff contacted the owners of both facilities to determine the nature and size of their businesses. Classic Marine stated the company makes a small number of custom fiberglass boats (none manufactured in 2010), and those are built outside the District, in El Dorado County. Its primary business is boat repair using epoxy materials.

Whitcat operates as a side business making custom catamarans and has built 20 catamarans since 1986 using a closed molding process. Whitcat built only one boat in 2010, and that boat was built outside the District, in Costa Mesa, California.

Typical catamaran sailboats weigh between 200 and 600 pounds, not all of which is due to the fiberglass hulls. However, to estimate worst case emissions, Staff calculated the VOC emissions from the application of 600 pounds of polyester resin with a monomer content of 50%. The emission factor was calculated using the formula in Table 4 of the CTG for an atomized, open molding application, the most emissive application method. The application of 600 pounds of polyester resin was estimated to result in VOC emissions of 111 pounds, or 0.056 tons per year. To exceed the 2.7 tons per year CTG threshold would require building 48 boats per year using the open molding process. This is more than twice the number of boats that Whitcat has built in the last 25 years combined. Furthermore, the catamarans built by Whitcat use a closed molding process, which is much less emissive than an open molding process. Staff concludes that Whitcat's VOC emissions are less than the CTG threshold.

The conversations with Classic Marine, Whitcat, and with a longtime Sacramento area boat repair shop (Sacramento Boat Repair) also confirmed that there are no other boat manufacturing facilities remaining in Sacramento County. No fiberglass boat manufacturing facilities large enough to exceed the CTG emissions threshold are expected in the near future. A negative declaration is proposed for this source category.

ENVIRONMENTAL COMPLIANCE

In adopting these negative declarations, the District is not adopting new requirements for emission sources. No source will need to change its operations to comply with a requirement. Staff finds that the adoption of these negative declarations is not subject to the California Environmental Quality Act because it is an activity that will not result in a direct or reasonably foreseeable indirect physical change in the environment. (Public Resources Code 21084(a) and Preliminary Review, Section 15060(c)(2) State CEQA Guidelines).

CONCLUSION

Staff's analysis shows that there are no sources within the District to which the CTGs for Automobile and Light-Duty Truck Assembly Coatings and Fiberglass Boat Manufacturing Materials apply. No fiberglass boating manufacturing facilities large enough to exceed the CTG emissions threshold of 2.7 tons per year are anticipated in the future. There are no automobile or light-duty truck assembly facilities within the District and none are expected in the near future. Negative declarations are proposed for these source categories.

Pursuant to section 182(b) of the Clean Air Act, the District should adopt negative declarations for the following CTGs:

Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings. U.S. EPA Publication No. EPA-453/R-08-006, September 2008.

Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials. U.S. EPA Publication No. EPA-453/R-08-004, September 2008.