

COMPARATIVE ANALYSIS

PROPOSED NEW RULE 67.12.1 – POLYESTER RESIN OPERATIONS

STATUTORY REQUIREMENTS

Prior to adopting, amending, or repealing a rule or regulation, California Health and Safety Code Section 40727 requires findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined therein. As part of the consistency finding and to ensure proposed rule requirements do not conflict with or contradict other Air Pollution Control District (District) or federal regulations, Health and Safety Code Section 40727.2(a) requires the District to perform a written analysis identifying and comparing the air pollution control standards and other provisions of proposed new Rule 67.12.1 with existing or proposed District rules and guidelines and existing federal rules, requirements, and guidelines applying to the same source category.

ANALYSIS

Proposed new Rule 67.12.1 applies to polyester resin operations and associated cleaning operations emitting volatile organic compounds (VOC). The U.S. Environmental Protection Agency (EPA) has published a Control Techniques Guidelines (CTG) for Fiberglass Boat Manufacturing Materials applicable to this source category. This CTG applies to fiberglass boat manufacturing operations where the total actual VOC emissions from all fiberglass boat manufacturing operations are 15 pounds per day or greater.

EPA has also published two federal regulations that apply to polyester resin operations: Subpart VVVV – National Emission Standard for Hazardous Air Pollutants (NESHAP) for Boat Manufacturing, and Subpart WWWW – NESHAP for Reinforced Plastic Composites Production. Both NESHAPs apply to major sources of air toxics (i.e., 10 tons per year of any one air toxic, or 25 tons per year of a combination of air toxics.)

In addition, District New Source Review (NSR) Rule 20.2 – Non-Major Stationary Sources, also applies to any new or modified polyester resin operation that would be subject to new Rule 67.12.1. Rule 20.2 requires that any non-major new or modified emission unit that has a post-project potential to emit of 10 pounds/day or more of VOC be equipped with Best Available Control Technology (BACT). For polyester resin operations, BACT is identified as either use of an add-on emission control system, or if such system is demonstrated to be not cost-effective, compliance with the requirements of current Rule 67.12. Since new Rule 67.12.1 contains VOC content limits for various polyester resin materials and cleaning materials that are more stringent than the existing rule, these limits will become the new BACT requirements.

CONCLUSION

As shown in Table 1, there are no conflicts or contradictions between proposed new Rule 67.12.1 and EPA's CTG Control Techniques Guidelines. Furthermore, there are no contradictions between the proposed new rule and the District's NSR Rule 20.2 BACT requirements.

TABLE 1 – COMPARATIVE ANALYSIS

Items for Comparison	Proposed New Rule 67.12.1	CTG for Fiberglass Boat Manufacturing Materials
Applicability	All polyester resin operations and associated surface preparation and coating application equipment cleaning.	Fiberglass boat manufacturing operations where the total actual VOC emissions from all fiberglass boat manufacturing operations are 15 lbs/day or greater.
Exemptions	Exempt from rule: polyester resin operations using 20 gallons or less of polyester resin materials per month. Exempt from controlled enclosure/controlled process requirement: dry sanding, grinding or cutting of fiber reinforced plastic parts associated with exempt operations.	No exemptions
VOC Content Standards	VOC content limits for various categories of polyester resin materials and cleaning solvents.	VOC content limits for various categories of polyester resin materials and cleaning solvents.
Add-On Emission Control Requirements	Capture and control efficiency >90 % by weight, as an alternative to complying with VOC content limits.	Control system that will achieve an equivalent reduction in emissions as achieved by complying with the applicable VOC limits.
Recordkeeping	Current list of polyester resin materials and solvent materials used with the VOC content and daily or monthly usage records. Records to be kept for three years.	N/A
Test Methods	Various methods approved by EPA or ARB, including VOC content, vapor pressure, and capture efficiency.	None Specified

* There are currently no applicable federal New Source Performance Standards (NSPS) to this source category. National Emission Standards for Hazardous Air Pollutants (NESHAP) – Boat Manufacturing (NESHAP Subpart VVVV) and Reinforced Plastic Composites Production (NESHAP Subpart WWWW) – apply to facilities that emit more than 10 tons/year of any one hazardous air pollutant (HAP) or 25 tons/year of a combination of HAPs. There are currently no sources in San Diego County that are subject to these two NESHAPs.