



Control Techniques Guidelines (CTG) for the Use of Coatings and Solvents

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Background Information

- The Federal Clean Air Act requires states to implement all reasonably available control technology (RACT) for sources of emissions in ozone nonattainment areas.
- The United States Environmental Protection Agency (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 feasibility.



Background Information

- The EPA issues CTG documents in lieu of national rules for specific sources of volatile organic compounds (VOC) emissions.
- States must revise their state implementation plan (SIP) for ozone nonattainment areas with moderate or higher classification to include RACT, as applicable, for each category of VOC emission sources covered by a CTG document issued between November 15, 1990, and the date of attainment.
 - Dallas-Fort Worth (DFW) area
 - Houston-Galveston-Brazoria (HGB) area



Background Information

- CTG documents provide information on various emission sources and control recommendations to assist states in their RACT determinations.
- States must determine if controlling emissions from those sources constitutes RACT and determine if it is necessary to develop rules to control those emission sources.
- States can use the recommendations in EPA's CTG documents or adopt different approaches to controlling emissions from the sources.



CTG Documents

- EPA issued 11 CTG documents in 2006-2008.
- Some CTG categories were addressed in 2010:
 - Offset Lithographic and Letterpress Printing;
 - Flat Wood Paneling Coatings;
 - Fiberglass Boat Manufacturing Materials; and
 - Automobile and Light-Duty Truck Assembly Coatings (in the HGB area only).



CTG Documents

- CTG categories currently being evaluated:
 - Flexible Package Printing;
 - Industrial Cleaning Solvents;
 - Miscellaneous Industrial Adhesives;
 - Metal Furniture Coatings;
 - Miscellaneous Metal and Plastic Parts Coatings;
 - Large Appliance Coatings;
 - Paper, Film, and Foil Coatings; and
 - Automobile and Light-Duty Truck Assembly Coatings (in the DFW area only).



Flexible Package Printing

- Affects manufacturers of:
 - bags, pouches, liners, and wraps using paper, film, plastic, aluminum foil, metalized or coated paper or film, or any combination of these materials
 - flexible packaging material that use rotogravure or flexographic printing processes
- CTG recommendations:
 - VOC content limits for coatings
 - optional efficiency requirements for control equipment
 - work practice standards for cleaning solvents
 - lower applicability threshold
- Corresponds with existing §115.432(a)



Industrial Cleaning Solvents

- Affects facilities:
 - involved in manufacturing, repair, and service operations in multiple industry sectors that use cleaning solvents
 - listed as a potentially affected source in the CTG document
 - not affected by cleaning solvent requirements for a different CTG emission source category
- CTG recommendations:
 - VOC content limits
 - composite vapor pressure limits
 - optional efficiency requirements for control equipment
 - work practice standards for cleaning solvents
- New CTG category



Miscellaneous Industrial Adhesives

- Affects facilities:
 - involved in manufacturing, repair, and service operations in multiple industry sectors that apply industrial adhesives or adhesive primers
 - not affected by adhesive requirements in a different CTG emission source category
- CTG recommendations:
 - VOC content limits
 - optional efficiency requirements for control equipment
 - specific application methods
 - work practice standards for adhesive-related activities and cleaning solvents
- New CTG category



Metal Furniture Coatings

- Affects manufacturers of:
 - office and store fixtures, partitions, metal tables, chairs, wastebaskets, beds, desks, lockers, benches, shelves, file cabinets, lamps, or any other metal furniture
 - metal parts that will be part of nonmetal furniture products
- CTG recommendations:
 - VOC content limits for coatings
 - optional efficiency requirements for control equipment
 - specific coating application methods
 - work practice standards for cleaning solutions
- Corresponds with §115.421(a)(2)



Metal and Plastic Parts Coatings

- Affects:
 - manufacturers of metal or plastic parts that apply coatings to those parts if those parts are not already subject to another limit
 - facilities that coat metal or plastic parts on a contractual basis
- CTG recommendations:
 - VOC content limits
 - optional efficiency requirements for control equipment
 - specific coating application methods
 - work practice standards for coating-related activities and cleaning solvents
- Corresponds with §115.421(a)(8) for metal parts
- New CTG category for plastic parts



Large Appliance Coatings

- Affects manufacturers of:
 - doors, cases, lids, panels, and interior support parts of large appliances
 - residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, etc.
- CTG recommendations:
 - VOC content limits for coatings
 - optional efficiency requirements for control equipment
 - specific coating application methods
 - work practice standards for cleaning solutions
- Corresponds with §115.421(a)(1)



Paper, Film, and Foil Coatings

- Affects manufacturers of:
 - packaging paper, paper bags, coated paperboard, corrugated and solid fiber boxes, die-cut paper, paperboard and cardboard, folding paperboard boxes, carbon paper, or a combination of these materials
 - laminated aluminum foil
 - photographic film, pressure sensitive tape and labels
- CTG recommendations:
 - VOC content limits for coatings
 - optional efficiency requirements for control equipment
 - work practice standards for cleaning solutions
- Corresponds with §115.421(a)(4)



Automobile and Light-Duty Truck Assembly Coatings

- Affects facilities that:
 - manufacture new automobile and light-duty truck bodies, body parts for new automobiles or light-duty trucks, and other parts that are coated along with these new bodies or body parts
 - apply coatings to new automobile and light-duty truck bodies or body parts on a contractual basis
- CTG recommendations:
 - VOC content limits for coatings
 - optional efficiency requirements for control equipment
 - specific testing requirements
 - work practice standards for cleaning solutions
- Corresponds with §115.421(a)(8)



Informal Comments

- The TCEQ is accepting informal comments on these CTG documents. CTG documents can be downloaded from the CTG Stakeholder Group Web page:

www.tceq.state.tx.us/implementation/air/rules/ctg/control_techniques_stakeholder.html

- The TCEQ is requesting informal comments on:
 - number of affected facilities in DFW and HGB areas;
 - technical and economic feasibility of the CTG recommendations;
 - modifications or alternatives for specific CTG recommendations, such as exemption thresholds, control requirements, etc.; and
 - suggestions for control strategy concepts in addition to, or in lieu of, the CTG recommendations.



Informal Comments

- When submitting comments:
 - identify the CTG you are commenting on;
 - provide detailed technical information;
 - if suggesting specific rules please provide a copy, Web link, or citation for the rule;
 - clearly identify any confidential information; and
 - explain the basis of economic feasibility information provided on a dollar per ton basis, e.g., capital dollar per ton for the first year, dollar-per-ton annualized over five years, etc.
- Written comments (non-confidential information only) will be posted on the CTG Stakeholder Group Web page.



Informal Comments

- Please submit comments by **January 5, 2011**.
- Electronic comments are preferable, and may be submitted via e-mail to fdowiak@tceq.state.tx.us. All electronic comments should reference Project Number 2010-016-115-EN.
- Mail comments to Frances Dowiak, MC-206, Air Quality Division, Chief Engineer's Office, TCEQ, PO Box 13087, Austin, TX 78711-3087.
- Fax comments to (512) 239-5687.



Timeline

- The planned timeline for this rulemaking:
 - tentative proposal agenda: June 8, 2011;
 - public hearings in DFW and HGB: July 2011; and
 - tentative adoption agenda: November 16, 2011.



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