
TITLE 326 AIR POLLUTION CONTROL BOARD

FISCAL IMPACT STATEMENT

LSA Document #07-351

Agency: Indiana Department of Environmental Management (IDEM)**Rule Number:** #07-351**Rule Topic:** Consumer and Commercial Products (CCP)**Re:** Office of Management and Budget Fiscal Impact Statement Required by [IC 4-22-2-28\(c\)](#) and [IC 4-22-2-28\(e\)](#)

-Total Estimated Economic Impact of a Rule over \$500,000

Rule Summary

The draft rule is one of a suite of measures recommended by the Lake Michigan Air Directors Consortium (LADCO) to reduce volatile organic compound (VOC) emissions and ozone formation in the upper Midwest and eastern United States. VOCs contribute to the formation of ozone, and it is necessary to control VOCs in order to meet the United States Environmental Protection Agency's (U.S. EPA) 8-hour ozone National Ambient Air Quality Standard (NAAQS).

Indiana is a participant in LADCO and has agreed to regulate VOC emissions from source categories that it has not previously regulated in order to reduce its contribution to regional ozone formation. The reductions in VOC expected from this rulemaking are part of the Indiana Department of Environmental Management's (IDEM) State Implementation Plan (SIP) development process.

Additional VOC emissions reductions are needed to address the narrow margin between Indiana's current air quality and the existing 8-hour ozone NAAQS, the challenges Indiana faces in improving air quality to meet the new 8-hour ozone NAAQS of 0.075 ppm that U.S. EPA lowered on March 12, 2008, and concerns expressed by other states that emissions from Indiana are contributing to their inability to attain the standard (the Clean Air Act provides a legal mechanism for those states to require Indiana to reduce Indiana's potential contribution to nonattainment in other states). Additionally, on September 16, 2009, U.S. EPA announced it would reconsider the 2008 NAAQS for ozone. U.S. EPA proposed revisions to the ozone standards on January 19, 2010, and will issue a final decision by August 31, 2010. Once Indiana has an effective consumer and commercial products (CCP) rule, the state will be able to receive credits for VOC reductions to assist ozone nonattainment counties in meeting the revised or proposed 8-hour ozone NAAQS.

In this rulemaking, Indiana is proposing to add a CCP rule to the Article 8 VOC rules at [326 IAC 8-15](#). This rulemaking will assist Indiana counties in achieving and maintaining the revised 8-hour ozone NAAQS. The proposed rule is based on the Ozone Transport Commission (OTC) model rule from September 2006 and includes VOC content limits for CCPs, regulatory flexibility provisions for innovative products and alternative control plans, labeling requirements, record keeping and reporting requirements, and compliance and test methods. The OTC is a multistate organization created under the Clean Air Act and is responsible for developing regional solutions to the ground level ozone problem in the Northeast and mid-Atlantic regions of the U.S.

The character of the CCP industry makes quantifying the fiscal impact for this rulemaking a challenge. The fiscal analyses relied on by other states and their administrative agencies that have promulgated CCP regulations recognize that the majority of costs are incurred during the process of reformulating of non-compliant products to compliant products. Other administrative costs, incurred after product reformulation, are minimal compared to the cost of creating compliant products. However, the proposed VOC content limits in the draft rule have been effective in multiple states for at least three years. Therefore, many national and regional manufacturers have completed the reformulation process. Compliant products are being sold by these manufacturers and are currently available in Indiana.

Because of the complications presented by this rule in quantifying the fiscal impacts for the AIM coatings industry, IDEM cannot definitively state that the rule's impact will be less than \$500,000. Therefore, IDEM has prepared the fiscal impact statement required by [IC 4-22-2-28\(c\)](#) and [IC 4-22-2-28\(e\)](#) for this rulemaking.

**Fiscal Impact
Background**

Indiana, as a member of LADCO, has committed to develop this CCP rule as part of Indiana's SIP development. The SIP is a compendium of the ways in which Indiana attains and maintains compliance with the NAAQS. The 2006 OTC model rule has been implemented in several states, providing evidence of the economic and technical feasibility of the model rule's concentration limits. IDEM has included the expected reductions of VOCs from both manufacturing and end users resulting from this rulemaking as part of Indiana's SIP development process with U.S. EPA.

U.S. EPA published a federal CCP rule on September 11, 1998 (40 CFR Part 59, Subpart C). The federal rule limits the VOC content of 24 CCP categories, representing 48% of the CCP inventory nationwide, and requires all regulated products manufactured after December 10, 1998, to meet VOC content limits. U.S. EPA

estimated that VOC emissions from the 24 CCP categories regulated by the federal rule were reduced by 20%. However, because over half of the CCP inventory is not regulated by the federal rule, U.S. EPA estimated VOC reductions of only 9.7% for the entire CCP inventory from uncontrolled levels. U.S. EPA is currently revising the existing federal CCP rule and the revised federal rule is expected to be based on the 2006 OTC model rule.

Phase In Period Costs

The fiscal analysis for the OTC model rule from 2000, completed by the California Air Resources Board (CARB), estimated a cost of approximately \$800 per ton of VOC reduced. The 2006 OTC model rule added more CCP categories and VOC content limits. In 2004, the CARB estimated the cost effectiveness of the additional CCP categories to be \$4,800 per ton. Both of the fiscal analyses completed by CARB assumed that national, regional and state CCP manufacturers would have to incur substantial one-time phase in costs for product reformulation or discontinuation and new product labeling. These phase-in costs, and not post-full implementation costs (the ongoing cost of manufacturing compliant coatings), accounted for the majority of estimated costs. In 2006, LADCO estimated that implementing the 2000 OTC model rule would reduce VOCs by approximately 3,145 tons per year in Indiana. With the addition of CCP categories in the 2006 OTC model rule, LADCO estimated an additional reduction of 2,382 tons of VOC per year in Indiana.

The model rule was written to include standards for which a substantial number of CCP categories already complied with the VOC content limits for each product category, ultimately reducing total reformulation costs. The VOC content limits in the 2006 OTC model rule have been implemented and effective in California and a majority of OTC states including Connecticut, Maine, Maryland, Massachusetts, New Jersey, and Pennsylvania. Delaware and the District of Columbia are currently revising their CCP rules to add the additional categories included in the 2006 OTC model rule. Furthermore, Illinois, Michigan, and Ohio have effective CCP rules based on the 2006 OTC model rule. The costs outlined in CARB's analyses relied on by both the OTC and LADCO in support of VOC content limits for CCPs beyond the federal rule have been spread over a large portion of sales at a national level for at least a three year period. Because reformulation of CCP inventory has already been completed the economic impact of Indiana's rule is a fraction of the costs estimated by CARB and LADCO.

Affected Businesses

The draft rule applies to any person who sells, supplies, offers for sale, or manufactures consumer products for use in Indiana. Manufacturers are to ensure compliance with the VOC limits by reformulating CCPs. CARB focused their 1999 and 2004 fiscal analyses on manufacturers and marketers because those businesses are the ones directly affected by the VOC content limits.

CARB's analysis showed that the majority of affected businesses would be able to absorb the costs of the proposed VOC limits with no significant adverse impacts on profitability. However, the proposed limits may impose economic hardship on some businesses with small profit margins. These businesses, may seek relief under variance provisions for extensions of compliance dates. Indiana's draft rule does not include variance provisions; however, there are statutory variance procedures available for sources for which compliance with the rule would create an undue hardship. Indiana's statutory variance procedures can be found at [IC 13-14-8-8](#). Furthermore, the draft rule contains provisions that allow manufacturers to apply for either an innovative products exemption or an Alternative Control Plan in order to exempt the consumer product from the VOC content limits in the rule.

CARB found that the bulk of consumer products subject to the draft rule are manufactured or marketed by a large number of companies worldwide. A search of Indiana's permitting database using the following Standard Industrial Classification (SIC) codes used in California's 1999 analysis: 2841-soap and other detergents except specialty cleaners, 2842-specialty cleaners, polishing, and sanitation preparations, 2844-perfume, cosmetic and other toilet preparations, 2879-agricultural chemicals, not elsewhere classified, 2891-adhesives and sealants, identified 54 manufacturers permitted in Indiana that may be affected by the draft rule. International, national, and regional manufacturers outside of Indiana will also be impacted by the rule.

Post-Implementation Costs (Total Estimated Economic Impact)

Once CCPs have been reformulated and relabeled, manufacturing costs to make lower VOC products are in line with traditional CCP manufacturing technology. The expense is not in the equipment but in the formulation knowledge and application experience and the amount of time to gain both of these. Record keeping and reporting costs and compliance testing would be ongoing costs but would not be expected to be significant as regional and national manufacturers must already satisfy the record keeping and reporting requirements of CCP regulations in other states.

Companies that supply raw materials and equipment for use in reformulated CCPs would potentially benefit from the proposed rule as they experience an increase in demand for their products. On the other hand, those companies that supply raw materials for noncompliant CCPs may experience a decline in demand for their products.

Examination of Alternatives

IDEM's alternative considered for this rulemaking was to wait for U.S. EPA to update the federal CCP rule and not initiate a state rulemaking for CCPs. However, to date, U.S. EPA has not moved forward with their rulemaking and Indiana has relied on the associated reductions in its SIP development process.

The fiscal impact to Indiana for not completing this rulemaking would be increased costs to businesses in the state and human and environmental health costs if counties cannot achieve attainment for the new 8-hour ozone standard. If an area is not in attainment for the ozone NAAQS the permitting and operating costs for new and expanding businesses are higher than in counties that attain the standard.

Conclusion

The VOC content limits in the 2006 OTC model rule have been implemented and effective in California and a majority of the OTC states since 2006. Additionally, Illinois, Michigan, and Ohio have effective CCP rules based on the 2006 OTC model rule. The costs outlined in CARB's analyses relied on by both OTC and LADCO in support of VOC content limits for CCPs beyond the federal rule have been spread over a large portion of sales at a national level for at least a three year period.

U.S. EPA, in a memo from Stephen Page, Director, Office of Air Quality Planning and Standards, dated May 30, 2007, stated that for CCPs nearly all products distributed nationwide are already formulated to comply with one or more state regulations with categories and limits that meet or exceed the requirements of the expected revised federal rule. This memo is in line with the comments that IDEM received for this rulemaking from several national organizations. These organizations requested that if IDEM moves forward with the rulemaking, that IDEM follow the OTC model rule in order to ensure consistency among states. Using the OTC model rule as the basis for Indiana's CCP rule will ensure that CCPs are readily available that already meet the more stringent VOC content limits.

IDEM cannot definitively demonstrate that the estimated economic impact of this rule in Indiana will be less than \$500,000. Therefore, IDEM is estimating that the economic impact of the rule could be greater than \$500,000 in order to provide the Office of Management and Budget with sufficient time and information to prepare its fiscal impact statement. The costs will encompass reformulation of products for the manufacturers that do not already sell compliant products and the costs of record keeping, reporting, and changing product literature for those manufacturers that have already reformulated. The fiscal analyses for the OTC model rule estimated a cost of approximately \$800 per ton of VOC reduced based on the CARB cost analysis from 1999. In 2004, CARB estimated the cost effectiveness of the additional CCP categories to be \$4,800 per ton of VOC reduced. These cost estimates assumed that all products would have to be reformulated to meet the lower VOC content limits. However, the reality of the CCP market is that it is comprised almost entirely of national and regional manufacturers. The prevalence of existing VOC CCP rules throughout the region and United States demonstrate that much of this transition has already taken place.

Small Business Fiscal Impact

The estimated economic impact on small businesses for Indiana is included in the total fiscal impact of the draft rule. The manufacturing and marketing of CCPs is typically on a regional or national basis. Therefore, any small business in Indiana that manufactures CCPs for sale outside Indiana is most likely producing compliant coatings, in accordance with Indiana's draft rule, for sale in one other state in the region (Illinois, Ohio, and Michigan have effective CCP rules), the OTC states, or California. A small business has the option to request a variance from the draft rule under Indiana's statutory variance provisions at [IC 13-14-8-8](#), or use the provisions in the draft rule to request an innovative products exemption or alternative control plan.

Fiscal Impact on State and Local Government

In Indiana, state or local government agencies that use CCPs regulated by this rule in their ordinary course of business will have the same variety of products available to purchase as any other industrial, commercial, or household consumer. In addition, the cost of ensuring compliance will be handled at existing staffing levels. There is no unfunded mandate on state or local governments as a result of this rulemaking.

Additional Rule Information

The U.S. EPA sets NAAQS for ozone to protect public health and the environment. The Clean Air Act (CAA) requires U.S. EPA to review the scientific information and standards for ozone every five years to ensure the standards adequately protect public health and the environment. Ozone can impact both human health and the environment. Ground level ozone can cause respiratory problems for sensitive groups such as the very young, elderly, or for people with asthma or other chronic respiratory problems. Ozone damages the leaves of trees and other plants, reduces crop and forest yields, and generally makes them more susceptible to disease, harsh weather, insects, and other pollutants. Ozone and volatile chemicals can be carried long distances, leading to widespread and regional air pollution.

The costs of implementing this rule are justified by the benefit that Indiana receives in ensuring that counties are able to achieve and maintain attainment of the 8-hour ozone standard. Several counties in Indiana are at risk of being designated as nonattainment for the revised 8-hour ozone NAAQS that became effective on May 27, 2008. Additionally, U.S. EPA is reconsidering the revised standard and could lower it further in the future. For areas designated as nonattainment, IDEM will be required to submit to U.S. EPA a SIP, which must include an inventory of emissions, enforceable emission limitations, related control measures, and schedules for compliance.

Furthermore, Indiana is also obligated to address interstate transport of ozone and must reduce its contributions to areas outside the state that are currently designated as nonattainment for the 8-hour ozone NAAQS.

In order to improve air quality, areas of nonattainment can expect increased permitting restrictions on new and expanding businesses. Specifically, achieving attainment will likely require additional planning requirements for existing sources of ozone precursor pollutants such as VOC. These restrictions could disadvantage nonattainment areas when competing with attainment counties to attract new industries and increase economic development. Once Indiana has an effective CCP rule, the state will be able to receive credits for VOC reductions to assist ozone nonattainment counties meet the revised or proposed 8-hour ozone NAAQS.

This rule is a cost effective measure for Indiana to reduce VOC emissions and assist counties that risk being designated as nonattainment for the new 8-hour ozone standard in achieving attainment.

Sources of Information

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