

# THE DEC POLICY SYSTEM



New York State  
Department of Environmental Conservation

## PROGRAM POLICY

Department ID:  
DAR-7

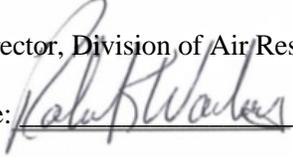
Program ID:  
Air Guide-30

Title: Procedures for Exemptions for Innovative Products from Consumer and Commercial Products  
Regulation Part 235

### Issuing Authority:

Name: Robert Warland

Title: Director, Division of Air Resources

Signature: 

Date: \_\_\_\_\_

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### Originating Unit:

Office/Division: Division of Air Resources

Unit: Bureau of Air Quality Planning

Phone: 518-457-0615

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### Abstract:

This policy describes the procedure to grant or obtain an exemption from the applicable consumer and commercial products percent volatile organic compound(s) (VOC) by weight content limits for innovative products

### Related References:

All applicable rules, regulations and federal requirements are listed in DAR-7.

## I. PURPOSE

The purpose of this policy is clarify the procedure for granting and obtaining an exemption from applicable consumer and commercial products percent VOCs by weight content limits for innovative products.

## II. BACKGROUND

This policy, formerly Air Guide 30, is being reissued with no changes under the DEC Policy System.

## III. POLICY

This policy was developed to assist consumer and commercial products manufacturers to gain an exemption for innovative products that due to product formulation, design, delivery system or other factor(s), will result in VOC emissions equal to or less than the VOC emissions from a product of the same product category which meets the applicable VOC limit.

## **IV. RESPONSIBILITY**

The Division of Air Resources will review applications for exemption and grant these exemptions as appropriate.

This policy describes a procedure to follow to grant or obtain an exemption from the applicable consumer and commercial products percent volatile organic compound(s) (VOC) by weight content limits for innovative products.

Innovative products are defined in Part 235.7(h) as those which prove that due to some characteristic of the product formulation, design, delivery system, or other factor(s), the use of the product will result in VOC emissions equal to or less than the VOC emissions from a product of the same product category which meets the applicable VOC limit.

- A.
1. Determine which product category is applicable and the respective percent VOC by weight content limit that applies.
  2. Calculate the VOC emissions from a representative consumer product which complies with the respective VOC standards specified in Section 235.4, 235.5 or 235.6, respectively; or
  3. Calculate the VOC emissions from a noncomplying representative product, as if the product had been reformulated to comply with the VOC standards specified in Section 235.4, 235.5, or 235.6, respectively. VOC emissions shall be calculated using the following equation:

$$\text{equation (1) } E_R = (E_{NC} \times \text{VOC}_{STD}) / \text{VOC}_{NC}$$

Where:

- $E_R$  = The VOC emissions from the noncomplying representative product, had it been reformulated.
- $E_{NC}$  = The VOC emissions from the noncomplying representative product in its current formulation.
- $\text{VOC}_{STD}$  = The VOC standard specified in Section 235.4, 235.5, or 235.6, respectively.
- $\text{VOC}_{NC}$  = The VOC content of the noncomplying product in its current formulation.

If a manufacturer can demonstrate, because of characteristics of product formulation or other factors, that this equation is inappropriate, an alternative method of demonstration may be used. This alternative method is subject to the approval of the Department.

- B.
- For the purposes of this section, "representative consumer product" means a consumer product which meets all of the following criteria:
1. the representative product shall be subject to the same respective VOC limit in Section 235.4, 235.5, or 235.6, respectively.
  2. the representative product shall be of the same product form as the innovative product, unless the innovative product uses a new form which does not exist in the product category at the time the application is made.

3. the representative product shall have at least similar efficacy as other consumer products in the same product category based on tests generally accepted for that product category by the consumer products industry.
- C. A manufacturer shall apply in writing to the New York State Department of Environmental Conservation, Division of Air Resources, 50 Wolf Rd., Albany, N.Y. 12233-3251, for any exemption claimed under Section 235.7(h). The manufacturer shall include but not be limited to the following information: the VOC content of the product for which an exemption is requested; the grams VOC per second application rate; and a diagram depicting the design or the delivery system employed. The application shall include the supporting documentation that demonstrates emissions from the innovative product meet the applicable VOC limit. This includes the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage. The manufacturer may request of the Department, pursuant to 6NYCRR Part 616, that certain information submitted by the manufacturer in connection with this exemption request be treated as a trade secret. Such request should be made at the time the exemption request is submitted.
  - D. In granting an exemption for a product, the Department shall establish conditions that are enforceable. The Department may also specify the test methods for determining conformance to the conditions established. The methods may include criteria for the reproducibility, accuracy, and sampling and laboratory procedures.
  - E. For any product which an exemption has been granted pursuant to Part 235.7(h), the manufacturer shall report to the Department in writing within 30 days any change in the product formulation or recommended product usage directions, and shall also report to the Department within 30 days any information which would alter the emissions estimates submitted to the Department in support of the exemption application.
  - F. If VOC standards are lowered for a product category through any subsequent rulemaking, all innovative product exemptions granted for products in the category shall have no force and effect as of the effective date of the modified VOC Standard.
  - G. If the Department determines that a consumer product for which an exemption has been granted no longer meets the criteria for an innovative product specified on page 3 of these guidelines, notice will be provided to the manufacturer, the manufacturer has thirty days to refute such determination otherwise the Department may modify or revoke the exemption as necessary to assure that the product will meet these criteria.

## Example Exemption

### EXAMPLE FOR EXEMPTION OF AN INNOVATIVE PRODUCT FROM THE APPLICABLE PERCENT VOC BY WEIGHT LIMIT OF PART 235

For the purposes of this example, we will use a product category that will be subject to an 80% VOC content limit. A product proposed for exemption under subpart 235.7(h) will be termed the Innovative Product, and the product to which the Innovative Product will be compared is the Noncomplying Product reformulated to meet the applicable VOC limit. In this example, two theoretical Innovative Products, Innovative Product #1 (85% VOC) and Innovative Product #2 (90% VOC), have been tested versus a currently marketed Noncomplying Product (95% VOC) in a large- based consumer use test. The purpose of this test was to determine the amount of VOC emitted on a per use basis during normal consumer use of each product. The following sections demonstrate the means by which such data show if sufficient VOC reductions have been established to justify exemption from the applicable VOC limit via subpart 235.7(h).

#### A. Results from Consumer Product-Use Testing

Testing is performed using a large groups of consumers to determine the amount of VOC emitted per use. Product is weighed both before distribution to consumers and again after recovery from test subjects at the end of the test. Consumer test subjects are also instructed to record each use of the product.

#### CONSUMER TEST PRODUCT

<u>CRITERION</u>	<u>Innovative Product</u>		<u>Noncomplying</u>
	<u>#1 (85% VOC)</u>	<u>#2 (90% VOC)</u>	<u>Product (95% VOC)</u>
# Panelist	200	200	200
Avg. Total grams product	60	54	64
Avg. Total # uses	15	18	16
Avg. Grams product/use	4.0	3.0	4.0
Avg. Grams VOC/use ((grams product/use) x % VOC)	3.4	2.7	3.8

B. VOC Reductions Versus the Noncomplying Product

Based on consumer-use data, the emissions from the use of an Innovative Product can be compared to that of the Noncomplying Product.

<u>Product</u>	<u>Product Grams/use</u>	<u>% VOC</u>	<u>Grams VOC/use</u>	<u>Emissions Reductions* For Innovative Products Vs. Noncomplying Product</u>
Noncomplying Product	4.0	95%	3.8	NA
Innovative Product #1	4.0	85%	3.4	11%
Innovative Product#2	3.0	90%	2.7	24%

\* Relative, rather than absolute, % VOC emissions reductions. To satisfy an 80% VOC standard, the Noncomplying Product would require emissions reductions of about 16%.

C. Reductions Justifying Exemption

Using the proposed equation, one can determine if the magnitude of VOC emissions reductions will equal or exceed the emissions reductions from a theoretical reformulation of the Noncomplying Product from 95% to 80% VOC. Although both Innovative Products #1 and #2 provide reductions of VOC emissions/use versus the Noncomplying Product, only Innovative Product #2 provides reductions equal to or greater than that of the Noncomplying Product had it been reformulated to the 80% VOC. Therefore Innovative Product #2 is exempted from the applicable VOC limit.

Calculate VOC emissions “E<sub>R</sub>” for the hypothetical, reformulated equation (1) Noncomplying Product using equation (1)

$$E_R = (E_{NC} \times VOC_{STD}) / VOC_{NC}$$

Where:

E<sub>R</sub> = VOC emissions from Noncomplying Product, had it been reformulated to 80% VOC

E<sub>NC</sub> = VOC emissions from Noncomplying Product in current formulation.

VOC<sub>STD</sub> = VOC standard (80%)

VOC<sub>NC</sub> = current VOC content of Noncomplying Product.

<u>Product</u>	<u>Product g/use</u>	<u>VOC%</u>	<u>Grams VOC/use</u>	<u>E<sub>R</sub>*Grams VOC/use</u>	<u>Innovative Product Emissions Reductions** Relative to Hypothetical 80% Product (E<sub>R</sub>)</u>
Noncomplying Product	4.0	95% (VOC <sub>NC</sub> )	3.8 (E <sub>NC</sub> )	3.2	NA
Innovative Product #1	4.0	85%	3.4	NA	-6% ***
Innovative Product #2	3.0	90%	2.7	NA	+19%

\* Emissions (grams VOC/use) for Noncomplying Product had it been reformulated to meet the 80% VOC standard

\*\* VOC emissions reductions beyond that needed to comply with the 80% standard

\*\*\* Innovative Product #1 does NOT exceed the 80% benchmark and therefore is not exempted from the applicable VOC limit regulations.