

SUBPART 231-12**AMBIENT AIR QUALITY IMPACT ANALYSIS**

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Historical Note

Subpart (§§ 231-12.1—231-12.8) filed Jan. 20, 2009 eff. 30 days after filing.

Preamble: This Subpart sets forth the procedures and requirements for the performance of an air quality impact analysis to determine whether a new or modified facility complies with quantified air quality levels, including air quality standards, PSD increments and monitoring de minimis levels, air quality related values, and significant impact levels.

§ 231-12.1 Applicability.

(a) The following provisions apply to all new facilities or modifications required to evaluate impact on the surrounding areas and the public including, but not limited to ambient and sensitive receptors, public health impacts, nonattainment areas, and Federal class I areas.

(b) The impact analysis procedures are also appropriate for conducting any required air quality related environmental impact assessments in conjunction with the permit application for the proposed new or modified facility.

Historical Note

Sec. filed Jan. 20, 2009 eff. 30 days after filing.

§ 231-12.2 Modeling analysis methodologies.

(a) The ambient impact analysis must follow the procedures in the applicable guidelines at 40 CFR part 51, appendix W: Guideline on Air Quality Models of the EPA and the NYSDEC Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis available from the department. Emissions of PM-10 and PM-2.5 used in a modeling analysis for this Part must include both the filterable and condensable fractions (see definitions of PM-10 and PM-2.5 in Part 200 of this Title).

(b) Where an air quality model specified in appendix W of 40 CFR part 51 is deemed inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case by case basis or, where appropriate, on a generic basis for a specific program. Written approval from the department must be obtained for any modification or substitution. In addition, use of a modified or substituted model shall be subject to public notice and opportunity for public comment, with the determination of a complete permit application, in accordance with Parts 201 and 621 of this Title.

(c) For the purposes of Subparts 231-7 and 231-8 of this Part, the owner or operator of the proposed new or modified facility must demonstrate that allowable emission increases from the proposed facility or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions) would not, at a minimum, cause or contribute to air pollution in violation of:

- (1) any national ambient air quality standard in any air quality control region;
- (2) quantified air quality related values (AQRVs) including visibility for the applicable Federal class I areas; and

(3) any applicable maximum allowable PSD increment increase over the baseline concentration in any area, as defined in the following table:

<i>Contaminant</i>	<i>Maximum allowable increase (micrograms per cubic meter)</i>
Federal Class I	
Particulate matter:	
PM-10, annual arithmetic mean	4
PM-10, 24-hr maximum	8
PM-2.5, annual arithmetic mean	1
PM-2.5, 24 hour maximum	2
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5
Class II	
Particulate matter:	
PM-10, annual arithmetic mean	17
PM-10, 24-hr maximum	30
PM-2.5, annual arithmetic mean	4
PM-2.5, 24 hour maximum	9
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
Nitrogen dioxide:	
Annual arithmetic mean	25
Class III	
Particulate matter:	
PM-10, annual arithmetic mean	34
PM-10, 24-hr maximum	60
PM-2.5, annual arithmetic mean	8
PM-2.5, 24 hour maximum	18
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700
Nitrogen dioxide:	
Annual arithmetic mean	50

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) The emission rates for any existing emission sources to be used for the analysis of increment increases in paragraph (c)(3) of this section can be based on representative actual emissions instead of the allowable emission rates, provided the maximum actual rates under representative normal operations are used for short term increments. Any increment expansions analysis for the purposes of paragraph (c)(3) of this section must use representative actual short term and annual emissions instead of the allowable emissions.

(e) For the purposes of Subparts 231-5 and 231-6 of this Part, the owner or operator of the proposed new or modified facility must demonstrate that allowable emission increases from the proposed new or modified facility would not, at a minimum, cause or contribute to air pollution in violation of any national ambient air quality standard in any non-attainment area in accord with section 231-12.6 of this Subpart significance levels.

(f) For the purposes of the required net air quality benefit analysis of Subparts 231-5 and 231-6 of this Part, the owner or operator of the proposed new or modified facility must use the allowable emission increases from the proposed new or modified facility. For the impact offsetting sources, this analysis must use representative actual short term and annual emissions corresponding to the averaging times of the standards. The modeling methods for conducting the net air

quality benefit analyses are provided in NYSDEC Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis.

Historical Note

Sec. filed Jan. 20, 2009; amd. filed: Dec. 29, 2010 as emergency measure; March 28, 2011 as emergency measure; May 26, 2011 as emergency measure; July 19, 2011 as emergency measure; Sept. 16, 2011 as emergency measure; Sept. 15, 2011 eff. 30 days after filing. Amended (a), (c), (d), (f).

§ 231-12.3 Pre-application analysis for Subparts 231-7 and 231-8.

(a) Prior to submitting an application for a permit in accordance with Subpart 231-7 and Subpart 231-8 of this Part, the applicant must provide an analysis of air quality data in the area that the proposed new or modified facility would affect for each of the following regulated NSR contaminants:

(1) for the new facility, each regulated NSR contaminant that would have the potential to emit in an amount equal to or greater than the applicable significant project threshold in table 6 of Subpart 231-13 of this Part; and

(2) for the modified facility, each regulated NSR contaminant that would result in a significant net emissions increase.

(b) With respect to any such regulated NSR contaminant from the list of applicable regulated NSR contaminants in section 231-12.4 of this Subpart for which no NAAQS exists, the analysis must contain such air quality monitoring data as the department determines is necessary to assess ambient air quality for that regulated NSR contaminant in any attainment area that the emissions of the source would affect.

(c) With respect to any such regulated NSR contaminant for which a NAAQS does exist, the analysis must contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that regulated NSR contaminant would cause or contribute to a violation of the standard or any maximum allowable increase in section 231-12.2(c)(3) of this Subpart.

(d) In general, the continuous air quality monitoring data that is required must have been gathered over a period of at least one year and must represent at least the year preceding receipt of the application, except that, if the department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year, but not less than four months.

(e) The owner or operator of a proposed new or modified facility involving the emissions of VOC who satisfies all other conditions of Subparts 231-7 and 231-8 of this Part may, when authorized by the department, provide post approval monitoring data for ozone in lieu of providing preconstruction monitoring data.

(f) *Operations of monitoring stations.* The owner or operator of a new or modified facility must meet the requirements of appendix B to 40 CFR part 58 and the NYSDEC policy. Oversight of Private Air Monitoring Networks, available from the department, during the operation of monitoring stations for purposes of satisfying applicable provisions of this Subpart.

Historical Note

Sec. filed Jan. 20, 2009; amd. filed: Dec. 29, 2010 as emergency measure; March 28, 2011 as emergency measure; May 26, 2011 as emergency measure; July 19, 2011 as emergency measure; Sept. 16, 2011 as emergency measure; Sept. 15, 2011 eff. 30 days after filing. Amended (c).

§ 231-12.4 Exemption and waiver from onsite (i.e., site specific) air quality monitoring.

(a) The department may exempt a proposed new or modified facility from the requirements of section 231-12.3 of this Subpart with respect to monitoring for a particular regulated NSR contaminant, if:

(1) the emissions increase of the regulated NSR contaminant from the proposed new or modified facility would cause, in any attainment area, air quality impacts less than the following de minimis monitoring levels:

Carbon Monoxide	575 µg/m ³ , 8-hour average;
Nitrogen dioxide	14 µg/m ³ , annual average;
Particulate matter (PM-10)	10 µg/m ³ , 24-hr average;
PM-2.5	13 µg/m ³ , 24-hr. average; PM2.5 SMC ¹ approved as 0 ug/m3
Sulfur dioxide	13 µg/m ³ , 24-hour average;
Ozone ¹	see footnote
Elemental lead	0.1 µg/m ³ , 3-month average;
Fluorides	0.25 µg/m ³ , 24-hour average;
Total and reduced sulfur	10 µg/m ³ , 1-hour average;
Hydrogen sulfide	0.2 µg/m ³ , 1-hour average; or

(2) the concentrations of the regulated NSR contaminant in the area that the facility would affect are less than the concentrations listed in paragraph (1) of this subdivision.

(b) In cases where the source impacts are above the de minimis monitoring levels of paragraph (a)(1) of this section, the department may waive the requirements of section 231-12.3 of this Subpart with respect to monitoring for a particular regulated NSR contaminant for which an applicant makes an acceptable showing that:

- (1) representative existing ambient air monitoring data exists in the affected area and is of the quality and nature which demonstrates the current conditions of the area's air quality; or
- (2) representative ambient air monitoring data exists from a prior time period which can be demonstrated to be conservative (*i.e.*, higher) in establishing the current conditions of the area's air quality.

Historical Note

Sec. filed Jan. 20, 2009; amds. filed: Dec. 29, 2010 as emergency measure; March 28, 2011 as emergency measure; May 26, 2011 as emergency measure; July 19, 2011 as emergency measure; Sept. 16, 2011 as emergency measure; Sept. 15, 2011 eff. 30 days after filing. Amended (a)(1), (b).

§ 231-12.5 Post-construction monitoring.

The owner or operator of a new or modified facility may be required, after construction of the facility or modification, to conduct such ambient monitoring as the department determines is necessary to determine the effect of the emissions from the new or modified facility on air quality in any area.

Historical Note

Sec. filed Jan. 20, 2009 eff. 30 days after filing.

§ 231-12.6 Significant impact levels in nonattainment areas.

For the purposes of Subparts 231-5 and 231-6 of this Part, a new or modified facility will be considered to cause or contribute to a violation of a national ambient air quality standard when such new or modified facility would, at a minimum, exceed the following significant impact levels (SILs) at any locality that does not or would not meet the applicable national standard:

Regulated NSR Contaminant	Annual Average	Short Term Averaging Times (hours)			
		24	8	3	1
SO ₂	1.0 µg/m ³	5 µg/m ³		25 µg/m ³	
PM-10	1.0 µg/m ³	5 µg/m ³			
PM-2.5	0.3 µg/m ³	1.2 µg/m ³			
NO _x	1.0 µg/m ³				
CO			500 µg/m ³		2000 µg/m ³

¹No de minimis air quality level is provided for ozone. However, any net increase of 100 tons per year or more of NO_x or volatile organic compounds subject to Subpart 231-7 or Subpart 231-8 may be required to gather ambient air quality data according to the provisions of section 231-12.3.

Historical Note

Sec. filed Jan. 20, 2009; amds. filed: Dec. 29, 2010 as emergency measure; March 28, 2011 as emergency measure; May 26, 2011 as emergency measure; July 19, 2011 as emergency measure; Sept. 16, 2011 as emergency measure; Sept. 15, 2011 eff. 30 days after filing.

§ 231-12.7 Significant impact levels for facilities located in attainment areas.

For the purposes of an impact analysis in support of provisions of Subparts 231-7 and 231-8 of this Part, the significant impact levels defined in section 231-12.6 of this Subpart will serve to determine whether a new or modified source will have a significant air quality impact or a contribution to potential standards violation or PSD increment exceedances in both the attainment area of the proposed project and in any adjacent non-attainment areas. The levels in section 231-12.6 of this Subpart apply, with the exception of the PM_{2.5} SILs (i.e., PM_{2.5} annual average and PM_{2.5} 24-hr average) in all attainment areas in the State for the specific NSR contaminant and serve as the required modeling demonstration to show insignificant impacts for that contaminant. A showing that the maximum impacts from the proposed new or modified facility for any regulated NSR contaminant are below these significant impact levels will be deemed adequate as the required impact analysis to demonstrate that the source will not contribute to a standards violation or PSD increment exceedance for that regulated NSR contaminant. However, such a demonstration will not exclude the performance of any other required impact analysis to satisfy other applicable provisions of Subparts 231-5 to 231-8 of this Part, including the modeling for air quality related values in Federal class I areas.

Historical Note

Sec. filed Jan. 20, 2009; amds. filed: Dec. 29, 2010 as emergency measure; March 28, 2011 as emergency measure; May 26, 2011 as emergency measure; July 19, 2011 as emergency measure; Sept. 16, 2011 as emergency measure; Sept. 15, 2011 eff. 30 days after filing.

§ 231-12.8 Federal class I significant impact levels.

For the purposes of the PSD increment impact analysis in support of provisions of Subparts 231-7 and 231-8 of this Part, the following significant impact levels will be used to determine whether a new or modified facility will have a significant air quality impact in Federal class I areas:

<i>Regulated NSR Contaminant</i>	<i>Annual Average</i>	<i>24 Hour Average</i>	<i>3 Hour Average</i>
Sulfur Dioxide	0.1 µg/m ³	0.2 µg/m ³	1.0 µg/m ³
Nitrogen Dioxide	0.1 µg/m ³	Not applicable	Not applicable
PM-10	0.2 µg/m ³	0.3 µg/m ³	Not applicable
CO	Not applicable	Not applicable	Not applicable
PM-2.5	0.06 µg/m ³	0.07 µg/m ³	Not applicable

An analysis demonstrating that the maximum impacts from the proposed new or modified facility for any regulated NSR contaminant are below these significant impact levels in PSD defined class I areas will be deemed adequate as the required impact analysis to demonstrate that the source will not contribute to a standards violation or a PSD increment exceedance for that regulated NSR contaminant. However, such a demonstration will not exclude the performance of any other required impact analysis to satisfy other applicable provisions of Subparts 231-7 to 231-10 of this Part, including the modeling for air quality related values in Federal class I areas.

Historical Note

Sec. filed Jan. 20, 2009; amds. filed: Dec. 29, 2010 as emergency measure; March 28, 2011 as emergency measure; May 26, 2011 as emergency measure; July 19, 2011 as emergency measure; Sept. 16, 2011 as emergency measure; Sept. 15, 2011 eff. 30 days after filing.

