PART 231 New Source Review for New and Modified Facilities (effective 10/15/11) Applicability Worksheets

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Acronyms Used in Part 231 Worksheets

1) BAE – Baseline Actual Emissions
2) BACT – Best Available Control Technology
3) CO – Carbon Monoxide
4) CEI – Creditable Emission Increase
5) ES – Emission Source
6) ERC – Emission Reduction Credits
7) FC – Flowchart
8) GHG_e – Greenhouse Gas measured by CO_2 equivalents
9) GHG_m – Greenhouse Gas measured by mass
10) LAER – Lowest Achievable Emission Rate
11) MFT – Major Facility Threshold
12) NA – Nonattainment
13) NEI – Net Emission Increase
14) NOx – Oxides of Nitrogen
15) NSR – New Source Review
16) OTR – Ozone Transport Region
17) PAE – Projected Actual Emissions
18) PEP – Project Emission Potential
19) PM – Particulate Matter
20) PM-10 – Particulate Matter less than 10 micrometers
21) PM-2.5 – Particulate Matter less than 2.5 micrometers
22) PSD – Prevention of Significant Deterioration
23) PTE – Potential to Emit
24) SNEIT – Significant Net Emission Increase Threshold
25) SO_2 – Sulfur Dioxide
26) SPT – Significant Project Threshold
27) TPY – Tons per Year
28) VOC – Volatile Organic Compounds
29) WKS – Worksheet

Preface

There are four main scenarios that the following worksheets were based on. These scenarios are presented below along with key points.

- Nonattainment NSR (Subparts 231-5 & 6)
  - New major or modification to an existing minor facility (Subpart 231-5)
    - Nonattainment contaminants subject to Part 231 are only those with a potential to emit that exceeds the applicable major facility threshold
    - The facility cannot net out of Part 231 since netting is only allowed at existing major facilities
  - Existing major facility (Subpart 231-6)
    - The facility is considered to be major for all nonattainment contaminants and the project emissions are compared to the applicable significant project thresholds
- Attainment (PSD) NSR (Subparts 231-7 & 8)
  - New major or modification to an existing minor facility (Subpart 231-7)
    - If emissions of one PSD contaminant are greater than the applicable major facility threshold then the facility is considered major for all PSD contaminants and all of the other applicable PSD contaminant project emissions are compared to the applicable significant project threshold
  - Existing major facility (Subpart 231-8)
    - The facility is considered to be major for all PSD contaminants and the project emissions are compared to the applicable significant project thresholds

SUBPARTS 231-5 & 6, FACILITY TYPE/APPLICABILITY DETERMINATION WORKSHEET

FACILITY NAME:_____
ADDRESS:_____
APPLICATION DEC ID#_____
COUNTY:_____
PROPOSED PROJECT DESCRIPTION:_____
_____
EMISSION SOURCE ID#s _____, _____, _____, _____, _____, _____, _____

PREPARER'S NAME_____ TITLE_____
SIGNATURE_____ DATE___/____/____

REVIEWER'S NAME_____ REGION #___ DATE___/___/____

	Y	N	ACTION
1. Identify NA contaminants based on facility location (See maps in Appendix B): VOC____ NOx____ PM-10____ PM-2.5____ SO_2 ____			Go to 2
2. Is a new facility with emissions of any NA contaminant being proposed?			YES- Go to 3 NO - Go to 4
3. Follow each applicable path			Ozone NA - go to WKS-2 PM 10 or PM 2.5 NA - go to WKS-3
4. Is a modification (Re: paragraph 231-4.1(b)(29)), see NOTE #1, being proposed to an existing facility?			YES - Go to WKS-4 NO - See NOTE #2

COMMENTS:

NOTE #1 - *Modification.* Any physical change in, or change in the method of operation of, a facility which results in a level of annual emissions (not including any emission reductions) in excess of the Baseline Actual Emissions of any Regulated NSR Contaminant emitted by such facility or which results in the emission of any Regulated NSR Contaminant not previously emitted. A modification shall not include the following:

(i) routine maintenance, repair, or replacement as defined in 6 NYCRR Part 200.

(ii) use of an alternative fuel or raw material by reason of an order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(iii) use of an alternative fuel by reason of an order or rule under section 125 of the Clean Air Act;

(iv) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(v) use of an alternative fuel or raw material by a facility which:

(continued)

	(*a*) the facility was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 Subpart I or 40 CFR 51.166; or (*b*) the facility is approved to use, pursuant to this Part, or which is included in a permit issued pursuant to 40 CFR 52.21. (vi) an increase in the hours of operation or in the production rate, unless such change would be prohibited under any permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 Subpart I or 40 CFR 51.166; (vii) any change in ownership at a facility.
NOTE #2 -	Not subject to Subparts 231-5 or 6, however, project may be subject to the notification requirements of 231-3.5(c) if the applicant determines that the proposed project does not constitute a *modification* because all the project emission increases are attributable to independent factors in accordance with 231-4.1(b)(41)(i)(*c*).

SUBPART 231-5, PROPOSED NEW FACILITY IN AN OZONE NA AREA OR ATTAINMENT PORTION OF THE OZONE TRANSPORT REGION (VOC & NOx) – APPLICABILITY WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID#_____

	Y	N	ACTION
1. Is proposed facility located in Severe Ozone NA area?			YES - Go to 2 NO - Go to 3
2. For VOC or NOx, is facility PTE ≥ MFT? (Use WKS-12 for calculating PTE) VOC (PTE) _____ tpy ≥ 25 tpy? NOx (PTE) _____ tpy ≥ 25 tpy?			YES - See NOTE #1, go to 4 NO - See NOTE #2
3. Proposed facility is located in Marginal/Moderate ozone NA areas or in the attainment portion of the OTR. For VOC or NOx, is the facility PTE ≥ MFT? (Use WKS-12 for calculating PTE) VOC (PTE) _____ tpy ≥ 50 tpy? NOx (PTE) _____ tpy ≥ 100 tpy?			YES - See NOTE #3, go to 4 NO - See NOTE #2
4. Has the applicant complied with all of the following permit requirements (Re: section 231-5.2): a. Compliance certification (Re: subdivision 231-5.2(a)). b. Submittal of a benefit analysis (Re: subdivision 231-5.2(b)). c. Submittal of a LAER demonstration (Re: subdivision 231-5.2(c) and section 231-5.4). d. Submittal of an air quality impact evaluation, if required (Re: subdivisions 231-5.2(d)). e. Identification of emission sources providing emission offsets and submittal of copies of modified permits for the emission sources (Re: subdivisions 231-5.2(d)).			YES - See NOTE #4 NO - See NOTE #5

NOTE #1 - Major facility subject to Subpart 231-5 for each NA contaminant for which facility PTE ≥ MFT.

LAER control technology required for each emission source which is part of the proposed major facility and which emits any such NA contaminant.

Emission offset[†,‡] required for the entire amount of the facility PTE times offset ratio for each such NA contaminant:
For VOC & NOx: 1.3:1 offset ratio

NOTE #2 - Non-major facility, not subject to Subpart 231-5.

NOTE #3 - Major facility subject to Subpart 231-5 for each NA contaminant for which facility PTE ≥ MFT.

LAER control technology required for each emission source which is part of the proposed major facility and which emits any such NA contaminant.

Emission offset[†,‡] required for the entire amount of the facility PTE times offset ratio for each such NA contaminant.
For VOC & NOx: 1.15:1 offset ratio

NOTE #4 - Detailed NA review may proceed.

(continued)

NOTE #5 - Notice of incomplete application should be sent.

[†]An emission offset may be obtained from another NA area of equal or higher classification if emissions from such other area contribute to a violation of the National Ambient Air Quality Standard for the NA contaminant in the NA area of the proposed facility (Re: Section 231-5.5)

[‡]In areas where NOx is a regulated precursor for ozone and PM-2.5, NOx offsets that occurred on or after April 5, 2005 can be used to offset NOx emissions for both programs with the amount determined by the higher offset ratio (Re: subdivision 231-10.1(e))

SUBPART 231-5, PROPOSED NEW FACILITY IN A PM-10 OR PM-2.5 NA AREA – APPLICABILITY WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID#_____

	Y	N	ACTION
1. Is proposed facility located in PM-10 NA area?			YES - See NOTE #1, go to 2 and 3 NO - Go to 3
2. For PM-10, is facility PTE ≥ MFT? (Use WKS-12 for calculating PTE) PM-10 (PTE) _____ tpy ≥ 100 tpy?			YES - See NOTE #2, go to 4 NO - See NOTE #3
3. For PM-2.5, SO_2, or NOx, is the facility PTE ≥ MFT? (Use WKS-12 for calculating PTE) PM-2.5 (PTE) _____ tpy ≥ 100 tpy? SO_2 (PTE) _____ tpy ≥ 100 tpy? NOx (PTE) _____ tpy ≥ 100 tpy?			YES - See NOTE #4, go to 4 NO - See NOTE #3
4. Has the applicant complied with all of the following permit requirements (Re: section 231-5.2): a. Compliance certification (Re: subdivision 231-5.2(a)). b. Submittal of a benefit analysis (Re: subdivision 231-5.2(b)). c. Submittal of a LAER demonstration (Re: subdivision 231-5.2(c) and section 231-5.4). d. Submittal of an air quality impact evaluation, if required (Re: subdivisions 231-5.2(e)). e. Identification of emission sources providing emission offsets and submittal of copies of modified permits for the emission sources (Re: subdivisions 231-5.2(e)).			YES - See NOTE #5 NO - See NOTE #6

NOTE #1 - New York's PM-10 NA area is completely contained by a PM-2.5 NA area and therefore the facility must also evaluate emissions of PM-2.5 and its precursors for NA review.

NOTE #2 - Major facility subject to Subpart 231-5 for PM-10.

LAER control technology required for each emission source which is part of the proposed major facility and which emits PM-10.

Emission offset[†] required for the entire amount of the facility PTE of PM-10 at a 1:1 offset ratio and a net air quality benefit analysis

NOTE #3 - Non-major facility, not subject to Subpart 231-5.

NOTE #4 - Major facility subject to Subpart 231-5 for each NA contaminant for which facility PTE ≥ MFT.

LAER control technology required for each emission source which is part of the proposed major facility and which emits any such NA contaminant.

Emission offset[†,‡] required for the entire amount of the facility PTE times offset ratio for each such NA contaminant.
For PM-2.5: 1:1 offset ratio, and a net air quality benefit analysis (modeling required)
For SO_2 and NOx: 1:1 offset ratio

Emission offsets of PM-2.5 precursors (SO_2 and NOx) can be used to offset emission increases of direct PM-2.5 and vice versa at the following ratios:
1 ton PM-2.5 = 40 tons SO_2
1 ton PM-2.5 = 200 tons NOx

(continued)

NOTE #5 -	Detailed NA review may proceed.
NOTE #6 -	Notice of incomplete application should be sent.

†An emission offset may be obtained from another NA area of equal or higher classification if emissions from such other area contribute to a violation of the National Ambient Air Quality Standard for the NA contaminant in the NA area of the proposed facility (Re: Section 231-5.5)

‡In areas where NOx is a regulated precursor for ozone and PM-2.5, NOx offsets that occurred on or after April 5, 2005 can be used to offset NOx emissions for both programs with the amount determined by the higher offset ratio (Re: subdivision 231-10.1(e))

SUBPARTS 231-5 & 6, EXISTING FACILITY – APPLICABILITY WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID#_____

	Y	N	ACTION
1. Is a modification being proposed? (Re: Paragraph 231-4.1(b)(29) and NOTE #1 on WKS-1)			YES - Go to 2 NO - see NOTE #1
2. Identify NA contaminant(s) based on existing facility location (See maps in Appendix B). Ozone Precursors: VOC ____ NOx ____ PM-2.5 Precursors: SO_2 ____ NOx ____ PM-10 ____ PM-2.5____			Go to 3
3. For any identified NA contaminant, is the facility PTE ≥ MFT? * (Use WKS-12 for calculating PTE) Severe Ozone NA Area: VOC (PTE) _____ tpy ≥ 25 tpy? NOx (PTE) _____ tpy ≥ 25 tpy? Marginal/Moderate Ozone NA or attainment portion of the OTR: VOC (PTE) _____ tpy ≥ 50 tpy? NOx (PTE) _____ tpy ≥ 100 tpy? PM-2.5 NA Area: PM-2.5 (PTE) _____ tpy ≥ 100 tpy? SO_2 (PTE) _____ tpy ≥ 100 tpy? NOx (PTE) _____ tpy ≥ 100 tpy? PM-10 NA Area: PM-10 (PTE) _____ tpy ≥ 100 tpy?			YES - Go to 4 NO - Go to 5
4. Major facility, follow each applicable path.			Severe Ozone NA - WKS5A PM-10 or PM-2.5 NA - WKS-6 Marginal/Moderate Ozone NA or attainment portion of the OTR - WKS-7
5. Non-major facility, follow each applicable path			Severe Ozone NA - WKS8 PM-10 or PM-2.5 NA - WKS-9 Marginal/Moderate Ozone NA or attainment portion of the OTR - WKS-10
NOTE #1 - Not subject to Subpart 231-5 or 6 but may be subject to 231-3.5(c).			

*For a facility in an area that is NA for multiple contaminants, if the facility PTE is greater than or equal to the MFT for one NA contaminant it is considered to be major for all applicable NA contaminants

SUBPART 231-6, EXISTING MAJOR FACILITY MODIFICATION – SEVERE OZONE NA AREA – APPLICABILITY WORKSHEET

FACILITY NAME_____
APPLICATION DEC ID#_____
EMISSION SOURCE. ID#S_____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Major facility. For VOC or NOx, is PEP ≥ SPT?* (Use WKS-13 for calculating PEP) VOC (PEP) _____ tpy ≥ 2.5 tpy? NOx (PEP) _____ tpy ≥ 2.5 tpy?			YES - Go to 2 NO - See NOTE #1
2. Has a NEI analysis been provided by the applicant? (Re: Section 231-4.1(b)(30) and WKS-11A & B)			YES - Go to 3 NO - See NOTE #2
3. For VOC or NOx, is NEI > SNEIT?* VOC (NEI) _____ tpy > 25 tpy? NOx (NEI) _____ tpy > 25 tpy?			YES - See NOTE #3, go to 4 NO - See NOTE #4
4. Has the applicant complied with all of the following permit requirements(Re: section 231-6.3): a. Compliance certification (Re: subdivision 231-6.3(a)). b. Submittal of a benefit analysis (Re: subdivision 231-6.3(b)). c. Submittal of a LAER demonstration, if required. (Re: subdivision 231-6.3(c) and section 231-6.5) d. Submittal of an air quality impact evaluation, if required. (Re: subdivisions 231-6.3(d)) e. Identification of emission sources providing internal offset or emission offset and submittal of copies of modified permits for the emission sources (Re: subdivisions 231-6.3(d)).			YES - See NOTE #5 NO - See NOTE #2

NOTE #1-	Not subject to Subpart 231-6 review, however must comply with applicable Section 231-11.2 reasonable possibility requirements for insignificant modifications.
NOTE #2 -	Notice of incomplete application should be sent.
NOTE #3 -	Modification subject to Subpart 231-6 for each identified NA contaminant(s), if NEI > SNEIT: Control technology and emission offset[†,‡] required as provided in special rules (see WKS-5B)
NOTE #4 -	Must comply with applicable Section 231-6.2 and 231-11.1 Netting requirements.
NOTE #5 -	Detailed NA review may proceed.

* Each NA contaminant is evaluated independently and can result in the need to follow the “yes” path for one and the “no” path for another

† An offset may be obtained from another NA area of equal or higher classification if emissions from such other area contribute to a violation of the National Ambient Air Quality Standard for the NA contaminant in the NA area of the modification (Re: Section 231-6.6).

‡ In areas where NOx is a regulated precursor for ozone and PM-2.5, NOx offsets that occurred on or after April 5, 2005 can be used to offset NOx emissions for both programs with the amount determined by the higher offset ratio (Re: subdivision 231-10.1(e))

SUBPART 231-6, SPECIAL RULES FOR SEVERE OZONE NA AREA (VOC & NOx) – APPLICABILITY WORKSHEET (Re: subdivision 231-6.1(d))

FACILITY NAME_____
APPLICATION DEC ID#_____
EMISSION SOURCE ID#S _____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Continued from WKS-5A NOTE #3, for a modification located in Severe Ozone NA area and where NEI > SNEIT (25 tpy) for VOC or NOx, as applicable.			Go to 2
2. Is existing Facility PTE ≥ 100 tpy? (Use WKS-12 for calculating Facility PTE) VOC (PTE) _____ tpy ≥ 100 tpy? NOx (PTE) _____ tpy ≥ 100 tpy?			YES - Go to 4 NO - Go to 3
3. Modification subject to Subpart 231-6 for VOC or NOx, as applicable. Has applicant proposed to internally offset the PEP of VOC or NOx at 1.3:1?			YES - See NOTE #1 NO - See NOTE #2
4. Modification subject to Subpart 231-6 for VOC or NOx, as applicable. Has applicant proposed to internally offset the PEP of VOC or NOx at 1.3:1?			YES - See NOTE #3 NO - See NOTE #4

NOTE #1 -	The proposed emission increase shall not be considered as a modification for purposes of requiring an NSR permit under Part 231, however, all applicable permitting requirements of Part 201 shall apply. Also, all applicable requirements of Subpart 231-10 pertaining to ERCs that will be used for internal offset purposes shall apply. Go to 4 in WKS-5A.
NOTE #2 -	Emission offset required for the PEP of VOC or NOx, as applicable, at a ratio of at least 1.3:1 and BACT shall be substituted for LAER control technology required for each emission source which is part of the modification. Go to 4 in WKS-5A.
NOTE #3 -	The modification is exempt from the requirement for application of LAER control technology and an emission offset, but is fully subject to all other applicable Part 231 requirements. Go to 4 in WKS-5A.
NOTE #4 -	Emission offset required for the PEP of VOC or NOx, as applicable, at a ratio of at least 1.3:1 and LAER control technology required for each emission source which is part of the modification. Go to 4 in WKS-5A.

SUBPART 231-6, EXISTING MAJOR FACILITY MODIFICATION – PM-10 OR PM-2.5 NA AREA – APPLICABILITY WORKSHEET

FACILITY NAME_____
APPLICATION DEC ID#_____
EMISSION SOURCE. ID#S_____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Major facility. For applicable NA contaminants, is PEP ≥ SPT?* (Use WKS-13 for calculating PEP) PM-2.5 NA: PM-2.5 (PEP) _____ tpy ≥ 10 tpy? SO_2 (PEP) _____ tpy ≥ 40 tpy? NOx (PEP) _____ tpy ≥ 40 tpy? PM-10 NA: PM-10 (PEP) _____ tpy ≥ 15 tpy?			YES - Go to 2 NO - See NOTE #1
2. Has a NEI analysis been provided by the applicant? (Re: Section 231-4.1(b)(30) and WKS-11A & B)			YES - Go to 3 NO - See NOTE #2
3. For applicable NA contaminants, is NEI ≥ SNEIT?* PM-2.5 NA: PM-2.5 (NEI) _____ tpy ≥ 10 tpy? SO_2 (NEI) _____ tpy ≥ 40 tpy? NOx (NEI) _____ tpy ≥ 40 tpy? PM-10 NA: PM-10 (NEI) _____ tpy ≥ 15 tpy?			YES - See NOTE #3, go to 4 NO - See NOTE #4
4. Has the applicant complied with all of the following permit requirements(Re: section 231-6.3): a. Compliance certification (Re: subdivision 231-6.3(a)). b. Submittal of a benefit analysis (Re: subdivision 231-6.3(b)). c. Submittal of a LAER demonstration, if required. (Re: subdivision 231-6.3(c) and section 231-6.5) d. Submittal of an air quality impact evaluation, if required. (Re: subdivisions 231-6.3(e)) e. Identification of emission sources providing internal offset or emission offset and submittal of copies of modified permits for the emission sources (Re: subdivisions 231-6.3(e)).			YES - See NOTE #5 NO - See NOTE #2

NOTE #1- Not subject to Subpart 231-6 review, however must comply with applicable Section 231-11.2 reasonable possibility requirements for insignificant modifications.

NOTE #2 - Notice of incomplete application should be sent.

(continued)

NOTE #3 -	Modification subject to Subpart 231-6. For PM-10, PM-2.5, SO_2, and/or NOx, if identified NA contaminant(s) and NEI ≥ SNEIT: LAER control technology required for each emission source which is part of the modification and which emits any such NA contaminant. Emission offset[†,‡] required for the entire amount of the PEP of each such NA contaminant. For PM-10 and PM-2.5: 1:1 offset ratio and a net air quality benefit analysis (modeling) required (231-6.6(d)) For SO_2 and NOx: 1:1 offset ratio Emission offsets of PM-2.5 precursors (SO_2 and NOx) can be used to offset emission increases of direct PM-2.5 and vice versa at the following ratios: 1 ton PM-2.5 = 40 tons SO_2 1 ton PM-2.5 = 200 tons NOx
NOTE #4 -	Must comply with applicable Section 231-6.2 and 231-11.1 Netting requirements.
NOTE #5 -	Detailed NA review may proceed.

***** Each NA contaminant is evaluated independently and can result in the need to follow the “yes” path for one and the “no” path for another

[†] An offset may be obtained from another NA area of equal or higher classification if emissions from such other area contribute to a violation of the National Ambient Air Quality Standard for the NA contaminant in the NA area of the modification (Re: Section 231-6.6).

[‡] In areas where NOx is a regulated precursor for ozone and PM-2.5, NOx offsets that occurred on or after April 5, 2005 can be used to offset NOx emissions for both programs with the amount determined by the higher offset ratio (Re: subdivision 231-10.1(e))

SUBPART 231-6, EXISTING MAJOR FACILITY MODIFICATION – MARGINAL/MODERATE OZONE NA AREAS OR ATTAINMENT PORTION OF THE OZONE TRANSPORT REGION – APPLICABILITY WORKSHEET

FACILITY NAME_____
APPLICATION DEC ID#_____
EMISSION SOURCE. ID#S_____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Major facility. For VOC or NOx, is PEP ≥ SPT?* (Use WKS-13 for calculating PEP) VOC (PEP) _____ tpy ≥ 40 tpy? NOx (PEP) _____ tpy ≥ 40 tpy?			YES - Go to 2 NO - See NOTE #1
2. Has a NEI analysis been provided by the applicant? (Re: Section 231-4.1(b)(30) and WKS-11A & B)			YES - Go to 3 NO - See NOTE #2
3. For VOC or NOx, is NEI > SNEIT?* VOC (NEI) _____ tpy > 40 tpy? NOx (NEI) _____ tpy > 40 tpy?			YES - See NOTE #3, go to 4 NO - See NOTE #4
4. Has the applicant complied with all of the following permit requirements(Re: section 231-6.3): a. Compliance certification (Re: subdivision 231-6.3(a)). b. Submittal of a benefit analysis (Re: subdivision 231-6.3(b)). c. Submittal of a LAER demonstration, if required. (Re: subdivision 231-6.3(c) and section 231-6.5) d. Submittal of an air quality impact evaluation, if required. (Re: subdivisions 231-6.3(d)) e. Identification of emission sources providing internal offset or emission offset and submittal of copies of modified permits for the emission sources (Re: subdivisions 231-6.3(d)).			YES - See NOTE #5 NO - See NOTE #2

NOTE #1-	Not subject to Subpart 231-6 review, however must comply with applicable Section 231-11.2 reasonable possibility requirements for insignificant modifications.
NOTE #2 -	Notice of incomplete application should be sent.
NOTE #3 -	Modification subject to Subpart 231-6. For VOC and/or NOx, if NEI ≥ SNEIT: LAER control technology required for each emission source which is part of the modification and which emits any such NA contaminant. Emission offset[†,‡] at a ratio of 1.15:1 required for the entire amount of the PEP for each such NA contaminant.
NOTE #4 -	Must comply with applicable Section 231-6.2 and 231-11.1 Netting requirements.
NOTE #5 -	Detailed NA review may proceed.

* Each NA contaminant is evaluated independently and can result in the need to follow the “yes” path for one and the “no” path for another

† An offset may be obtained from another NA area of equal or higher classification if emissions from such other area contribute to a violation of the National Ambient Air Quality Standard for the NA contaminant in the NA area of the modification (Re: Section 231-6.6).

‡ In areas where NOx is a regulated precursor for ozone and PM-2.5, NOx offsets that occurred on or after April 5, 2005 can be used to offset NOx emissions for both programs with the amount determined by the higher offset ratio (Re: subdivision 231-10.1(e))

SUBPART 231-5, EXISTING NON-MAJOR FACILITY MODIFICATION – SEVERE OZONE NA AREA – APPLICABILITY WORKSHEET

FACILITY NAME_____
APPLICATION DEC ID#_____
EMISSION SOURCE. ID#S_____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Non-major facility. For VOC or NOx, is PEP ≥ MFT?* (Use WKS-13 for calculating PEP) VOC (PEP) _____ tpy ≥ 25 tpy? NOx (PEP) _____ tpy ≥ 25 tpy?			YES - See NOTE #1, go to 2 NO - See NOTE #2
2. Has the applicant complied with all of the following permit requirements(Re: section 231-5.2): a. Compliance certification (Re: subdivision 231-5.2(a)). b. Submittal of a benefit analysis (Re: subdivision 231-5.2(b)). c. Submittal of a LAER demonstration, if required. (Re: subdivision 231-5.2(c) and section 231-5.4) d. Submittal of an air quality impact evaluation, if required. (Re: subdivisions 231-5.2(d)) e. Identification of emission sources providing internal offset or emission offset and submittal of copies of modified permits for the emission sources (Re: subdivisions 231-5.2(d)).			YES - See NOTE #3 NO - See NOTE #4

NOTE #1-	Modification subject to Subpart 231-5. For VOC and/or NOx, if PEP ≥ MFT: LAER control technology required for each emission source which is part of the modification and which emits any such NA contaminant. Emission offset[†,‡] at a ratio of 1.3:1 required for the entire amount of the PEP for each such NA contaminant.
NOTE #2 -	Not subject to Subpart 231-5 review, however, if facility PTE after modification exceeds applicable MFT, a permit with new PTE limit is required (231-5.1(b)).
NOTE #3 -	Detailed NA review may proceed.
NOTE #4 -	Notice of incomplete application should be sent.

* Each NA contaminant is evaluated independently and can result in the need to follow the “yes” path for one and the “no” path for another

† An offset may be obtained from another NA area of equal or higher classification if emissions from such other area contribute to a violation of the National Ambient Air Quality Standard for the NA contaminant in the NA area of the modification (Re: Section 231-5.5).

‡ In areas where NOx is a regulated precursor for ozone and PM-2.5, NOx offsets that occurred on or after April 5, 2005 can be used to offset NOx emissions for both programs with the amount determined by the higher offset ratio (Re: subdivision 231-10.1(e))

SUBPART 231-5, EXISTING NON-MAJOR FACILITY MODIFICATION – PM-10 OR PM-2.5 NA AREA – APPLICABILITY WORKSHEET

FACILITY NAME_____
APPLICATION DEC ID#_____
EMISSION SOURCE. ID#S_____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Non-major facility. For any identified NA contaminant, is PEP ≥ MFT?* (Use WKS-13 for calculating PEP) PM-2.5 NA: PM-2.5 (PEP) _____ tpy ≥ 100 tpy? SO_2 (PEP) _____ tpy ≥ 100 tpy? NOx (PEP) _____ tpy ≥ 100 tpy? PM-10 NA: PM-10 (PEP) _____ tpy ≥ 100 tpy?			YES - See NOTE #1, go to 2 NO - See NOTE #2
2. Has the applicant complied with all of the following permit requirements(Re: section 231-5.2): a. Compliance certification (Re: subdivision 231-5.2(a)). b. Submittal of a benefit analysis (Re: subdivision 231-5.2(b)). c. Submittal of a LAER demonstration, if required. (Re: subdivision 231-5.2(c) and section 231-5.4) d. Submittal of an air quality impact evaluation, if required. (Re: subdivisions 231-5.2(d)) e. Identification of emission sources providing internal offset or emission offset and submittal of copies of modified permits for the emission sources (Re: subdivisions 231-5.2(d)).			YES - See NOTE #3 NO - See NOTE #4

NOTE #1- Modification subject to Subpart 231-5.

For PM-10, PM-2.5, SO_2, and/or NOx, if identified NA contaminant(s) and PEP ≥ MFT:

LAER control technology required for each emission source which is part of the modification and which emits any such NA contaminant.

Emission offset[†,‡] required for the entire amount of the PEP for each such NA contaminant.
For PM-10 and PM-2.5: 1:1 offset ratio and a net air quality benefit analysis (modeling) required (231-5.5(d))
For SO_2 and NOx: 1:1 offset ratio

Emission offsets for PM-2.5 precursors (SO_2 and NOx) can be used to offset emission increases of direct PM-2.5 and vice versa at the following ratios:
1 ton PM-2.5 = 40 tons SO_2
1 ton PM-2.5 = 200 tons NOx

NOTE #2 - Not subject to Subpart 231-5 review, however, if Facility PTE after modification exceeds applicable MFT, a permit with new PTE limit is required (231-5.1(b)).

NOTE #3 - Detailed NA review may proceed.

NOTE #4 - Notice of incomplete application should be sent.

* Each NA contaminant is evaluated independently and can result in the need to follow the “yes” path for one and the “no” path for another

† An offset may be obtained from another NA area of equal or higher classification if emissions from such other area contribute to a violation of the National Ambient Air Quality Standard for the NA contaminant in the NA area of the modification (Re: Section 231-5.5).

‡ In areas where NOx is a regulated precursor for ozone and PM-2.5, NOx offsets that occurred on or after April 5, 2005 can be used to offset NOx emissions for both programs with the amount determined by the higher offset ratio (Re: subdivision 231-10.1(e))

SUBPART 231-5, EXISTING NON-MAJOR FACILITY MODIFICATION – MARGINAL/MODERATE OZONE NA AREAS OR ATTAINMENT PORTION OF THE OZONE TRANSPORT REGION – APPLICABILITY WORKSHEET

FACILITY NAME_____
APPLICATION DEC ID#_____
EMISSION SOURCE ID#S _____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Non-major facility. For VOC or NOx, is PEP ≥ MFT? * (Use WKS-13 for calculating PEP) VOC (PEP) _____ tpy ≥ 50 tpy? NOx (PEP) _____ tpy ≥ 100 tpy?			YES - See NOTE #1, go to 2 NO - See NOTE #2
2. Has the applicant complied with all of the following permit requirements:(Re: section 231-5.2). a. Compliance certification (Re: subdivision 231-5.2(a)). b. Submittal of a benefit analysis (Re: subdivision 231-5.2(b)). c. Submittal of a LAER demonstration. (Re: subdivision 231-5.2(c) and section 231-5.4) d. Submittal of an air quality impact evaluation, if required.(Re: subdivisions 231-5.2(d)) e. Identification of emission sources providing emission offsets and submittal of copies of modified permits for the emission sources (Re: subdivisions 231-5.2(d)).			YES - See NOTE #3 NO - See NOTE #4

NOTE #1 - Modification subject to Subpart 231-5.

For VOC and/or NOx, if PEP ≥ MFT:

LAER control technology required for each emission source which is part of the modification and which emits any such NA contaminant.

Emission offset* required for the entire amount of the PEP times offset ratio for each such NA contaminant.

VOC & NOx: 1.15:1 offset ratio.

NOTE #2 - Not subject to Subpart 231-5 review, however, if facility PTE after modification exceeds applicable MFT, a permit with new PTE limit is required (231-5.1(b)).

NOTE #3 - Detailed nonattainment review may proceed.

NOTE #4 - Notice of incomplete application should be sent.

* Each NA contaminant is evaluated independently and can result in the need to follow the “yes” path for one and the “no” path for another

† An offset may be obtained from another NA area of equal or higher classification if emissions from such other area contribute to a violation of the National Ambient Air Quality Standard for the NA contaminant in the NA area of the modification (Re: Section 231-5.5).

‡ In areas where NOx is a regulated precursor for ozone and PM-2.5, NOx offsets that occurred on or after April 5, 2005 can be used to offset NOx emissions for both programs with the amount determined by the higher offset ratio (Re: subdivision 231-10.1(e))

SUBPART 231-6, NET EMISSION INCREASE ANALYSIS WORKSHEET (Re: paragraph 231-4.1(b)(30))

FACILITY NAME:_____
APPLICATION DEC ID#_____
EMISSION SOURCE ID#s _____, _____, _____, _____, _____, _____, _____

NOTE: A net emission increase analysis is required for each nonattainment contaminant for which the PEP equals or exceeds the SPT.

Nonattainment contaminant(s) for which PEP ≥ SPT (circle): VOC NOx PM-10 PM-2.5 SO_2

Contemporaneous Period: (Re: FC-12, FC-13, and/or FC-14 and paragraph 231-4.1(b)(13))

Marginal/Moderate Ozone Nonattainment Areas and Attainment Portion of the Ozone Transport Region for VOC or NOx; and PM-10 or PM-2.5 Nonattainment Areas - The period beginning five years prior to the scheduled commence construction date of the new or modified emission source, and ending with the scheduled commence operation date. These dates must be proposed by an applicant in a permit application.

Severe Ozone Nonattainment Area - for emissions of VOC or NOx only, the five consecutive calendar year period which ends with the calendar year that the proposed modification is scheduled to commence operation, as stated by the applicant in a permit application.

Alternative Operating Scenario - for facilities proposing to use an alternative operating scenario pursuant to Part 201 of this Title, the period beginning five years prior to the date of complete application (as defined in section 621.2 of this Title) for the permit modification and ending with the final permit issuance date.

Scheduled commence construction date: _____
Scheduled commence operation date: _____

Start date of contemporaneous period: _____
End date of contemporaneous period: _____

Net Emission Increase - The aggregate increase in emissions of a regulated NSR contaminant in tpy at an existing major facility resulting from the sum of:

(i) the project emission potential of the modification; and

(ii) every creditable emission increase at the facility which is contemporaneous and for which an emission offset was not obtained; and

(iii) any ERC at the facility, or portion thereof, selected by the applicant which is contemporaneous and which was not previously used as part of an emission offset, an internal offset, or relied upon in the issuance of a permit under this Part.

Net Emission Increase Summary

	VOC	NOx	PM-10	PM-2.5	SO_2
Project Emission Potential (tpy, use WKS-13)					
Contemporaneous creditable emission increase/ERC (±tpy, use WKS-11B)					
NET EMISSION INCREASE (±tpy)					

SUBPART 231-6, CONTEMPORANEOUS CREDITABLE EMISSION INCREASES/EMISSION REDUCTION CREDITS WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID#_____

Nonattainment Contaminants (circle one): VOC NOx PM-10 PM-2.5 SO_2

Contemporaneous Period, See NOTE #1:_____

EMISSION SOURCE ID#s _____, _____, _____, _____, _____, _____, _____

1. Emission Source	2. Description of contemporaneous change at source	3. Date of occurrence	4. Contemporaneous creditable emission increase/ERC (±tpy), See NOTEs #2, #3
Sum of all increases/decreases above			

NOTE #1 - *Contemporaneous*. The time period used in a net emission increase determination for a regulated NSR contaminant as follows:

(i) except as stated in subparagraphs (ii) and (iii) of this paragraph, the period beginning five years prior to the scheduled commence construction date of the new or modified emission source, and ending with the scheduled commence operation date. These dates must be proposed by an applicant in a permit application;

(ii) in the severe ozone nonattainment area, for emissions of VOC or NOx only, the five consecutive calendar year period which ends with the calendar year that the proposed modification is scheduled to commence operation, as stated by the applicant in a permit application; or

(iii) for facilities proposing to use an alternative operating scenario pursuant to Part 201 of this Title, the period beginning five years prior to the date of complete application (as defined in Part 621.2 of this Title) for the permit modification and ending with the final permit issuance date.

(continued)

NOTE #2 -	*Creditable emission increase*. Any increase in emissions of a regulated NSR contaminant in tpy from an existing major facility, other than such an increase from any proposed modification of the existing major facility that is under review by the department, which: (i) results from a physical change in, or a change in the method of operation of an existing emission source(s), or the addition of a new emission source(s); and (ii) for an existing emission source(s) is quantified as the difference between baseline actual emissions and projected actual emissions, and for a new emission source(s) is quantified based on the potential to emit of the emission source(s).
NOTE #3 -	*Emission reduction credit, ERC*. The actual decrease in emissions of a regulated NSR contaminant, in tpy, determined in accordance with the requirements of Subpart 231-10 of this Part.

SUBPARTS 231-5 & 6, FACILITY POTENTIAL TO EMIT CALCULATION WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID#_____

NOTE: Facility PTE is -

A. For a proposed new facility - Sum of the PTE of each proposed emission source.

B. For an existing facility - Sum of the PTE of each existing emission source.

NOTE: *PTE* - The maximum capacity of an air contamination source to emit any regulated air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the emission source to emit a regulated air pollutant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as a part of the design if the limitation is enforceable by the department and the administrator. Fugitive emissions, to the extent that they are quantifiable, are included in determining the potential to emit where required by an applicable requirement. Secondary emissions (as defined in Part 231-4 of this Title) are not to be included when calculating an emission source's potential to emit. For emergency power generating stationary internal combustion engines, the potential to emit will be based on a maximum of 500 hours of operation per year per engine unless a more restrictive limitation exists in a permit or registration. (Re: subdivision 200.1(bl))

Nonattainment contaminant(s): (circle) VOC NOx PM-10 PM-2.5 SO_2

Facility Emission Potential Calculation

EMISSION SOURCE ID#	PTE of VOC (tpy)	PTE of NOx (tpy)	PTE of PM-10 (tpy)	PTE of PM-2.5 (tpy)	PTE of SO_2 (tpy)
Facility Potential To Emit (tpy) = (Sum of the potential to emit of each emission source)					

SUBPARTS 231-5 & 6, PROJECT EMISSION POTENTIAL CALCULATION WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID# _____
EMISSION SOURCE ID#s _____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Does the proposed modification involve addition of one or more new emission sources?			YES - Go to 2 NO - Go to 3
2. For each new emission source, what is the PTE (Re: subdivision 200.1(bl)) in tpy of each identified NA contaminant? ES ID# _____ _____ _____ _____ _____ _____ _____ VOC = _____ _____ _____ _____ _____ _____ _____ NOx = _____ _____ _____ _____ _____ _____ _____ PM-10 = _____ _____ _____ _____ _____ _____ _____ PM-2.5 = _____ _____ _____ _____ _____ _____ _____ SO_2 = _____ _____ _____ _____ _____ _____ _____	-	-	See NOTE #1, Go to 4
3. Therefore, the modification is of one or more existing emission sources.			Go to 5
4. Does the modification involve one or more existing emission sources?			YES - Go to 5 NO - Go to 7
5. For each existing emission source undergoing modification, what is the BAE (Re: paragraph 231-4.1(b)(4)) in tpy of each NA contaminant? ES ID# _____ _____ _____ _____ _____ _____ _____ VOC = _____ _____ _____ _____ _____ _____ _____ NOx = _____ _____ _____ _____ _____ _____ _____ PM-10 = _____ _____ _____ _____ _____ _____ _____ PM-2.5 = _____ _____ _____ _____ _____ _____ _____ SO_2 = _____ _____ _____ _____ _____ _____ _____	_	_	See NOTE #2, go to 6
6. For each existing emission source undergoing modification, what is the PAE (Re: paragraph 231-4.1(b)(41)) or the PTE (Re: subdivision 200.1(bl)) (if used in lieu of PAE) in tpy of each NA contaminant after modification? ES ID# _____ _____ _____ _____ _____ _____ _____ VOC = _____ _____ _____ _____ _____ _____ _____ NOx = _____ _____ _____ _____ _____ _____ _____ PM-10 = _____ _____ _____ _____ _____ _____ _____ PM-2.5 = _____ _____ _____ _____ _____ _____ _____ SO_2 = _____ _____ _____ _____ _____ _____ _____ Please indicate whether the numbers are PTE or PAE: PTE☐ PAE ☐	_	_	See NOTEs #1, #3, go to 7

7. **Project Emission Potential of VOC** = Sum of:
   a. Row 2 for VOC from each new emission source
   _____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

   b. the difference between (Row 6 - Row 5) for VOC from each modification of an existing emission source
   _____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of VOC = a + b = _____ tpy

(continued)

Project Emission Potential of NOx = Sum of:

a. Row 2 for NOx from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for NOx from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of NOx = a + b = _____ tpy

Project Emission Potential of PM-10 = Sum of:

a. Row 2 for PM-10 from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for PM-10 from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of PM-10 = a + b = _____ tpy

Project Emission Potential of PM-2.5 = Sum of:

a. Row 2 for PM-2.5 from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for PM-2.5 from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of PM-2.5 = a + b = _____ tpy

Project Emission Potential of SO_2 = Sum of:

a. Row 2 for SO_2 from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for SO_2 from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of SO_2 = a + b = _____ tpy

NOTE #1 - *Potential to emit.* The maximum capacity of an air contamination source to emit any regulated air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the emission source to emit a regulated air pollutant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as a part of the design if the limitation is enforceable by the department and the administrator. Fugitive emissions, to the extent that they are quantifiable, are included in determining the potential to emit where required by an applicable requirement. Secondary emissions (as defined in Part 231-4 of this Title) are not to be included when calculating an emission source's potential to emit. For emergency power generating stationary internal combustion engines, the potential to emit will be based on a maximum of 500 hours of operation per year per engine unless a more restrictive limitation exists in a permit or registration.

NOTE #2 - *Baseline actual emissions*. The annual rate of emissions of a regulated NSR contaminant from an emission source determined as follows:

(i) The average rate (as defined in Clauses a, b, c, and, d below), in tpy, at which an emission source physically emitted the contaminant during its baseline period, determined by using the source's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected baseline period.

(*a*) The average rate includes fugitive emissions to the extent quantifiable if the facility belongs to one of the source categories listed in Part 201-2.1(b)(21)(iii) of this Title, and emissions associated with startups, shutdowns, and malfunctions.

(continued)

(*b*) The average rate must be adjusted downward to exclude any non compliant emissions that occurred while the emission source was operating above any applicable emission limitation.

(*c*) Except for electric utility steam generating units, the average rate must be adjusted downward to exclude any emissions that exceeded an emission limitation with which the emission source must currently comply, had such emission source been required to comply with such limitations during the baseline period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions rate need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G). For the purposes of a creditable emission increase or emission reduction credit used for netting, currently means at the time that the increase or reduction actually occurred.

(*d*) For a regulated NSR contaminant, when a project involves multiple emissions sources, one baseline period must be used to determine the baseline actual emissions of the emission sources being modified. A different baseline period cannot be used for each regulated NSR contaminant.

(ii) The applicant must use a reliable basis for quantifying the baseline actual emissions. Continuous emissions monitoring (CEM) data or stack test data approved by the department must be used if the facility is required to generate such data. If such data is not available, acceptable bases for quantifying baseline actual emissions include, but are not limited to, emission statements, EPA's AP-42 emission factors, and fuel and solvent purchase records, with department approval.

NOTE #3 - *Projected actual emissions*. The maximum annual rate, in tpy, at which an existing emission source is projected to emit a regulated NSR contaminant in any one of the five years (12-month period) following the date the source commences operation after a modification, or in any one of the 10 years following that date if the project involves increasing the emission source's design capacity or its potential to emit that regulated NSR contaminant and full utilization of the emission source would result in exceeding the applicable significant project threshold in Tables 3, 4 or 6 of Subpart 231-13 of this Part or a significant net emissions increase at the major facility. Projected actual emissions are calculated only for existing major facilities.

(i) In determining the projected actual emissions as defined in this Section (before beginning actual construction), the owner or operator of the major facility:

(*a*) must consider all relevant information, including but not limited to, historical operational data, the facility's own representations, the facility's expected business activity and the facility's highest projections of business activity, the facility's filings with the State or federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and

(*b*) must include fugitive emissions to the extent quantifiable if the facility belongs to one of the source categories listed in Part 201-2.1(b)(21)(iii) of this Title, and emissions associated with startups and shutdowns; and

(*c*) may exclude, in calculating any increase in emissions that results from the particular project, that portion of the emission source's emissions following the project that the existing emission source could have accommodated during the consecutive 24 month period used to establish the baseline actual emissions and that are also unrelated to the particular project.

(ii) In lieu of using the method set out in Subparagraph (i) of this Paragraph, the owner or operator of the facility may elect to use the potential to emit of the emission source(s), in tpy.

SUBPARTS 231-7 & 8, FACILITY TYPE/APPLICABILITY DETERMINATION WORKSHEET

FACILITY NAME:_____
ADDRESS:_____
APPLICATION DEC ID# _____
COUNTY:_____
PROPOSED PROJECT DESCRIPTION:_____
_____
EMISSION SOURCE ID#s _____, _____, _____, _____, _____, _____, _____

PREPARER'S NAME_____ TITLE_____
SIGNATURE_____ DATE___/___/___

REVIEWER'S NAME_____ REGION #___ DATE___/___/___

	Y	N	ACTION
1. Is a new facility with emissions of any regulated NSR contaminant (Re: paragraph 231-4.1(b)(44)), see NOTE #1, being proposed?			YES- Go to WKS-15 NO - Go to 2
2. Is a modification (Re: paragraph 231-4.1(b)(29)), see NOTE #2, being proposed to an existing facility?			YES - Go to WKS-16 NO - See NOTE #3

COMMENTS:

NOTE #1- *Regulated NSR Contaminant.* A regulated NSR contaminant is any one of the following:

(i) Any contaminant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such contaminants identified under the Act or by the administrator of the US EPA in a promulgated rule;

(ii) Any contaminant that is subject to any standard promulgated under section 111 of the Act;

(iii) Any Federal Class I or II substance subject to a standard promulgated under or established by Title VI of the Clean Air Act; or

(iv) Any contaminant that otherwise is subject to regulation under the Clean Air Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR contaminants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a criteria contaminant listed under section 108 of the Act.

NOTE #2 - *Modification.* A modification is any physical change in, or change in the method of operation of, a facility which results in a level of annual emissions (not including any emission reductions) in excess of the Baseline Actual Emissions of any Regulated NSR Contaminant emitted by such facility or which results in the emission of any Regulated NSR Contaminant not previously emitted. A modification shall not include the following:

(i) routine maintenance, repair, or replacement as defined in 6 NYCRR Part 200.

(ii) use of an alternative fuel or raw material by reason of an order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(iii) use of an alternative fuel by reason of an order or rule under section 125 of the Clean Air Act;

(continued)

	(iv) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; (v) use of an alternative fuel or raw material by a facility which: (*a*) the facility was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 Subpart I or 40 CFR 51.166; or (*b*) the facility is approved to use, pursuant to this Part, or which is included in a permit issued pursuant to 40 CFR 52.21. (vi) an increase in the hours of operation or in the production rate, unless such change would be prohibited under any permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 Subpart I or 40 CFR 51.166; (vii) any change in ownership at a facility.
NOTE #3 -	Not subject to Subparts 231-7 or 8, however, project may be subject to the notification requirements of 231-3.5(c) if the applicant determines that the proposed project does not constitute a *modification* because all the project emission increases are attributable to independent factors in accordance with 231-4.1(b)(41)(i)(*c*).

SUBPART 231-7, PROPOSED NEW FACILITY – APPLICABILITY WORKSHEET

FACILITY NAME:_____

APPLICATION DEC ID#_____

	Y	N	ACTION
1. Is proposed facility one of the 26 listed source categories? (see Appendix C)			YES - Go to 2 NO - Go to 3
2. Is the proposed facility PTE ≥ 100 tpy for any regulated NSR contaminant (See Appendix D) other than GHGs; or ≥ 100 tpy GHGs by mass and ≥ 100,000 tpy CO_2e? (Use WKS-18 for calculating PTE) NOx _____ tpy PM-2.5 _____ tpy GHG_m _____ tpy SO_2 _____ tpy _____ _____ tpy GHG_e _____ tpy CO _____ tpy _____ _____ tpy PM _____ tpy PM-10 _____ tpy			YES - See NOTE #1, go to 4 NO - See NOTE #2
3. Is the proposed facility PTE ≥ 250 tpy for any regulated NSR contaminant (See Appendix D) other than GHGs; or ≥ 250 tpy GHGs by mass and ≥ 100,000 tpy CO_2e? (Use WKS-18 for calculating PTE) NOx _____ tpy PM-2.5 _____ tpy GHG_m _____ tpy SO_2 _____ tpy _____ _____ tpy GHG_e _____ tpy CO _____ tpy _____ _____ tpy PM _____ tpy PM-10 _____ tpy			YES - See NOTE #1, go to 4 NO - See NOTE #2
4. Has the applicant complied with all of the following permit requirements (Re: section 231-7.3): a. Air quality impact analyses (Re: subdivision 231-7.3(a)). b. BACT review (Re: subdivision 231-7.3(b)). c. Source impact analysis (Re: subdivision 231-7.3(c)). d. Source information (Re. subdivision 231-7.3(d)). e. Additional impact analyses (Re. subdivision 231-7.3(e)).			YES - See NOTE #3 NO - See NOTE #4

NOTE #1 - Major facility subject to Subpart 231-7 for each regulated NSR contaminant for which facility PTE ≥ SPT (see Appendix D).

Ambient air monitoring is required in accordance with Subpart 231-12

Air quality impact analysis is required in accordance with Subpart 231-12

BACT required in accordance with 231-7.6 for each emission source that is part of the proposed facility and which emits any such Regulated NSR Contaminant.

NOTE #2 - Non-major facility, not subject to Subpart 231-7.

NOTE #3 - Detailed PSD review may proceed.

NOTE #4 - Notice of incomplete application should be sent.

SUBPARTS 231-7 & 8, EXISTING FACILITY MODIFICATION

FACILITY NAME_____
APPLICATION DEC ID#_____
EMISSION SOURCE. ID#S_____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Is a modification being proposed? (Re: paragraph 231-4.1(b)(29) and NOTE #1 on WKS-1)			YES - Go to 2 NO - See NOTE #1
2. For any regulated NSR contaminant (see Appendix D) is existing facility PTE ≥ MFT? (See NOTE #2, use WKS-18 for calculating PTE) NOx _____ tpy PM-2.5 _____ tpy GHG_m _____ tpy SO_2 _____ tpy _____ _____ tpy GHG_e _____ tpy CO _____ tpy _____ _____ tpy PM _____ tpy PM-10 _____ tpy			YES - Go to 4 NO - Go to 3
3. Non-major facility. For any regulated NSR contaminant (see Appendix D) is PEP ≥ MFT? (See NOTE #2, use WKS-19 for calculating PEP) NOx _____ tpy PM-2.5 _____ tpy GHG_m _____ tpy SO_2 _____ tpy _____ _____ tpy GHG_e _____ tpy CO _____ tpy _____ _____ tpy PM _____ tpy PM-10 _____tpy			YES - See NOTE #3, go to 7 NO - See NOTE #4
4. Major facility. For any regulated NSR contaminant (see Appendix D) is PEP ≥ SPT?* (Use WKS-19 for calculating PEP) NOx (PEP)____ tpy ≥ 40 tpy? GHG_m (PEP)_____ tpy ≥ 0 tpy? SO_2 (PEP)____ tpy ≥ 40 tpy? GHG_e (PEP)_____ tpy ≥ 75,000 tpy? CO (PEP)____ tpy ≥ 100 tpy? PM (PEP)____ tpy ≥ 25 tpy? PM-10 (PEP)____ tpy ≥ 15 tpy? PM-2.5 (PEP)____ tpy ≥ 10 tpy? _____ (PEP)____ tpy _____ (PEP)____ tpy			YES - Go to 5 NO - See NOTE #5
5. Has a NEI analysis been provided by the applicant? (Re: paragraph 231-4.1(b)(30) and WKS-17A & B)			YES - Go to 6 NO - See NOTE #6
6. For any regulated NSR contaminant which satisfies condition #5, is NEI ≥ SNEIT?* (see Appendix D) NOx (NEI)____ tpy ≥ 40 tpy? GHG_m (NEI)_____ tpy ≥ 0 tpy? SO_2 (NEI)____ tpy ≥ 40 tpy? GHG_e (NEI)_____ tpy ≥ 75,000 tpy? CO (NEI)____ tpy ≥ 100 tpy? PM (NEI)____ tpy ≥ 25 tpy? PM-10 (NEI)____ tpy ≥ 15 tpy? PM-2.5 (NEI)____ tpy ≥ 10 tpy? _____ (NEI)____ tpy _____ (NEI)____ tpy			YES - See NOTE #7, go to 8 NO - See NOTE #8

(continued)

7. Has the applicant complied with all of the following permit requirements (Re: section 231-7.3): a. Air quality impact analyses (Re: subdivision 231-7.3(a)). b. BACT review (Re: subdivision 231-7.3(b)). c. Source impact analysis (Re: subdivision 231-7.3(c)). d. Source information (Re. subdivision 231-7.3(d)). e. Additional impact analyses (Re. subdivision 231-7.3(e)).			YES - See NOTE #9 NO - See NOTE #6
8. Has the applicant complied with all of the following permit requirements(Re: section 231-8.4): a. Air quality impact analyses (Re: subdivision 231-8.4(a)). b. BACT review (Re: subdivision 231-8.4(b)). c. Source impact analysis (Re: subdivision 231-8.4(c)). d. Source information (Re: subdivision 231-8.4(d)) e. Additional impact analyses (Re: subdivision 231-8.4(e))			YES - See NOTE #9 NO - See NOTE #6

NOTE #1 -	Not subject to Subpart 231-7 or 8 but may be subject to 231-3.5(c).
NOTE #2 -	MFT is 100 tpy for facilities included in the source category list in Appendix C or 250 tpy if not included; for GHGs emissions must also be above 100,000 tpy CO_2e
NOTE #3 -	Modification subject to Subpart 231-7 for each regulated NSR contaminant for which PEP ≥ SPT (See Appendix D) Ambient air monitoring is required in accordance with Subpart 231-12 Air quality impact analysis is required in accordance with Subpart 231-12 BACT required in accordance with 231-7.6 for each emission source that is part of the modification and which emits any such regulated NSR contaminant
NOTE #4 -	Not subject to Subpart 231-7 review, however, if Facility PTE after modification exceeds applicable MFT, a permit with new PTE limit is required (Re: subdivision 231-7.1(b)).
NOTE #5-	Not subject to Subpart 231-8 review, however must comply with applicable Section 231-11.2 reasonable possibility requirements for insignificant modifications.
NOTE #6 -	Notice of incomplete application should be sent.
NOTE #7 -	Modification subject to Subpart 231-8 for each regulated NSR contaminant with NEI ≥ SNEIT (See Appendix D) Ambient air monitoring is required in accordance with Subpart 231-12 Air quality impact analysis in accordance with Subpart 231-12 BACT required in accordance with 231-8.7 for each emission source that is part of the modification and which emits any such regulated NSR contaminant
NOTE #8-	Must comply with applicable Section 231-8.2 and 231-11.1 Netting requirements.
NOTE #9 -	Detailed PSD review may proceed.

*Each NA contaminant is evaluated independently and can result in the need to follow the “yes” path for one and the “no” path for another

SUBPART 231-8, NET EMISSION INCREASE ANALYSIS WORKSHEET (Re: paragraph 231-4.1(b)(30))

FACILITY NAME:_____
APPLICATION DEC ID#_____
EMISSION SOURCE ID#s _____, _____, _____, _____, _____, _____, _____

NOTE: A net emission increase analysis is required for each Regulated NSR Contaminant for which the PEP equals or exceeds the SPT, see Appendix D.

Common Regulated NSR Contaminant(s) for which PEP ≥ SPT (circle):

NOx SO_2 CO PM PM-10 PM-2.5 GHG_m GHG_e

List Other Contaminants for which PEP ≥ SPT _____ _____

Contemporaneous Period:

The period beginning five years prior to the scheduled commence construction date of the new or modified emission source, and ending with the scheduled commence operation date. These dates must be proposed by an applicant in a permit application.

Alternative Operating Scenario - for facilities proposing to use an alternative operating scenario pursuant to Part 201 of this Title, the period beginning five years prior to the date of complete application (as defined in section 621.2 of this Title) for the permit modification and ending with the final permit issuance date.

Scheduled commence construction date: _____
Scheduled commence operation date: _____

Start date of contemporaneous period: _____
End date of contemporaneous period: _____ (generally this is the same as the scheduled commence operation date)

Net Emission Increase - The aggregate increase in emissions of a regulated NSR contaminant in tpy at an existing major facility resulting from the sum of:

(i) the project emission potential of the modification; and

(ii) every creditable emission increase at the facility which is contemporaneous and for which an emission offset was not obtained; and

(iii) any ERC at the facility, or portion thereof, selected by the applicant which is contemporaneous and which was not previously used as part of an emission offset, an internal offset, or relied upon in the issuance of a permit under this Part.

GHG_m - The sum of the mass emissions of the aggregate group of six contaminants: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

GHG_e - The sum of each of the six greenhouse gases multiplied by their respective global warming potentials. The global warming potentials can be found in Appendix E.

Net Emission Increase Summary

	NOx	SO_2	CO	PM	PM-10	PM-2.5	GHG_m	GHG_e		
Project Emission Potential (tpy, use WKS-19)										
Contemporaneous creditable emission increase/ERC (±tpy, use WKS-17B)										
NET EMISSION INCREASE (±tpy)										

SUBPART 231-8, CONTEMPORANEOUS CREDITABLE EMISSION INCREASES/EMISSION REDUCTION CREDITS WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID#_____

Regulated NSR Contaminants (circle one/add one):

NOx SO_2 CO PM PM-10 PM-2.5 GHG_m GHG_e _____ _____

Contemporaneous Period, See NOTE #1:_____

EMISSION SOURCE ID#s _____, _____, _____, _____, _____, _____, _____

1. Emission Source	2. Description of contemporaneous change at source	3. Date of occurrence	4. Contemporaneous creditable emission increase/ERC (±tpy), See NOTEs #2, #3
Sum of all increases/decreases above			

NOTE #1 - *Contemporaneous*. The time period used in a net emission increase determination for a regulated NSR contaminant as follows:

(i) except as stated in subparagraphs (ii) and (iii) of this paragraph, the period beginning five years prior to the scheduled commence construction date of the new or modified emission source, and ending with the scheduled commence operation date. These dates must be proposed by an applicant in a permit application;

(ii) in the severe ozone nonattainment area, for emissions of VOC or NOx only, the five consecutive calendar year period which ends with the calendar year that the proposed modification is scheduled to commence operation, as stated by the applicant in a permit application; or

(continued)

	(iii) for facilities proposing to use an alternative operating scenario pursuant to Part 201 of this Title, the period beginning five years prior to the date of complete application (as defined in Part 621.2 of this Title) for the permit modification and ending with the final permit issuance date
NOTE #2 -	*Creditable emission increase*. Any increase in emissions of a regulated NSR contaminant in tpy from an existing major facility, other than such an increase from any proposed modification of the existing major facility that is under review by the department, which: (i) results from a physical change in, or a change in the method of operation of an existing emission source(s), or the addition of a new emission source(s); and (ii) for an existing emission source(s) is quantified as the difference between baseline actual emissions and projected actual emissions, and for a new emission source(s) is quantified based on the potential to emit of the emission source(s).
NOTE #3 -	*Emission reduction credit, ERC*. The actual decrease in emissions of a regulated NSR contaminant, in tpy, determined in accordance with the requirements of Subpart 231-10 of this Part.

SUBPARTS 231-7 & 8, FACILITY POTENTIAL TO EMIT CALCULATION WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID# _____

NOTE: Facility PTE is -

A. For a proposed new facility - Sum of the PTE of each proposed emission source.

B. For an existing facility - Sum of the PTE of each existing emission source.

NOTE: *PTE* - The maximum capacity of an air contamination source to emit any regulated air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the emission source to emit a regulated air pollutant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as a part of the design if the limitation is enforceable by the department and the administrator. Fugitive emissions, to the extent that they are quantifiable, are included in determining the potential to emit where required by an applicable requirement. Secondary emissions (as defined in Part 231-4 of this Title) are not to be included when calculating an emission source's potential to emit. For emergency power generating stationary internal combustion engines, the potential to emit will be based on a maximum of 500 hours of operation per year per engine unless a more restrictive limitation exists in a permit or registration. (Re: subdivision 200.1(bl))

NOTE: GHG_m is the sum of the mass emissions of the aggregate group of six contaminants: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

NOTE: GHG_e is the sum of each of the six greenhouse gases multiplied by their respective global warming potentials. The global warming potentials can be found in Appendix E.

Regulated NSR Contaminant(s): (circle/add)

NOx SO_2 CO PM PM-10 PM-2.5 GHG_m GHG_e _____ _____

Facility Emission Potential Calculation

EMISSION SOURCE ID#	PTE of NOx (tpy)	PTE of SO_2 (tpy)	PTE of CO (tpy)	PTE of PM (tpy)	PTE of PM-10 (tpy)
Facility Potential To Emit (tpy) = (Sum of the potential to emit of each emission source)					

(continued)

EMISSION SOURCE ID#	PTE of PM-2.5 (tpy)	PTE of GHG_m (tpy)	PTE of GHG_e (tpy	PTE of _____ (tpy)	PTE of _____ (tpy)
Facility Potential To Emit (tpy) = (Sum of the potential to emit of each emission source)					

SUBPARTS 231-7 & 8, PROJECT EMISSION POTENTIAL CALCULATION WORKSHEET

FACILITY NAME:_____
APPLICATION DEC ID# _____
EMISSION SOURCE ID#s _____, _____, _____, _____, _____, _____, _____

	Y	N	ACTION
1. Does the proposed modification involve addition of one or more new emission sources?			YES - Go to 2 NO - Go to 3
2. For each new emission source, what is the PTE (Re: subdivision 200.1(bl)) in tpy of each regulated NSR contaminant (See Appendix E for calculating GHG emissions)? ES ID# _____ _____ _____ _____ _____ _____ _____ NOx = _____ _____ _____ _____ _____ _____ _____ SO_2 = _____ _____ _____ _____ _____ _____ _____ CO = _____ _____ _____ _____ _____ _____ _____ PM = _____ _____ _____ _____ _____ _____ _____ PM-10 = _____ _____ _____ _____ _____ _____ _____ PM-2.5 = _____ _____ _____ _____ _____ _____ _____ GHG_m = _____ _____ _____ _____ _____ _____ _____ GHG_e = _____ _____ _____ _____ _____ _____ _____ _____ = _____ _____ _____ _____ _____ _____ _____ _____ = _____ _____ _____ _____ _____ _____ _____	-	-	See NOTE #1, Go to 4
3. Therefore, the modification is of one or more existing emission sources.			Go to 5
4. Does the modification involve one or more existing emission sources?			YES - Go to 5 NO - Go to 7
5. For each existing emission source undergoing modification, what is the BAE (Re: paragraph 231-4.1(b)(4)) in tpy of each regulated NSR contaminant (See Appendix E for calculating GHG emissions)? ES ID# _____ _____ _____ _____ _____ _____ _____ NOx = _____ _____ _____ _____ _____ _____ _____ SO_2 = _____ _____ _____ _____ _____ _____ _____ CO = _____ _____ _____ _____ _____ _____ _____ PM = _____ _____ _____ _____ _____ _____ _____ PM-10 = _____ _____ _____ _____ _____ _____ _____ PM-2.5 = _____ _____ _____ _____ _____ _____ _____ GHG_m = _____ _____ _____ _____ _____ _____ _____ GHG_e = _____ _____ _____ _____ _____ _____ _____ _____ = _____ _____ _____ _____ _____ _____ _____ _____ = _____ _____ _____ _____ _____ _____ _____	_	_	See NOTE #2, go to 6

(continued)

6. For each existing emission source undergoing modification, what is the PAE (Re: paragraph 231-4.1(b)(41)) or the PTE (Re: subdivision 200.1(bl)) (if used in lieu of PAE) in tpy of each regulated NSR contaminant after modification (See Appendix E for calculating GHG emissions)?	_	_	See NOTEs #1, #3, go to 7

ES ID#							
NOx =							
SO_2 =							
CO =							
PM =							
PM-10 =							
PM-2.5 =							
GHG_m =							
GHG_e =							
_____ =							
_____ =							

Please indicate whether the numbers are PTE or PAE: PTE ☐ PAE ☐

7. **Project Emission Potential of NOx** = Sum of:

a. Row 2 for NOx from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for NOx from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of NOx = a + b = _____ tpy

Project Emission Potential of SO_2 = Sum of:

a. Row 2 for SO_2 from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for SO_2 from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of SO_2 = a + b = _____ tpy

Project Emission Potential of CO = Sum of:

a. Row 2 for CO from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for CO from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of CO = a + b = _____ tpy

Project Emission Potential of PM = Sum of:

a. Row 2 for PM from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for PM from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of PM = a + b = _____ tpy

(continued)

Project Emission Potential of PM-10 = Sum of:

a. Row 2 for PM-10 from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for PM-10 from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of PM-10 = a + b = _____ tpy

Project Emission Potential of PM-2.5 = Sum of:

a. Row 2 for PM-2.5 from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for PM-2.5 from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of PM-2.5 = a + b = _____ tpy

Project Emission Potential of GHG_m = Sum of:

a. Row 2 for GHG_m from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for GHG_m from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of GHG_m = a + b = _____ tpy

Project Emission Potential of GHG_e = Sum of:

a. Row 2 for GHG_e from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for GHG_e from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of GHG_e = a + b = _____ tpy

Project Emission Potential of _____ = Sum of:

a. Row 2 for _____ from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for _____ from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of _____ = a + b = _____ tpy

Project Emission Potential of _____ = Sum of:

a. Row 2 for _____ from each new emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy;

and

b. the difference between (Row 6 - Row 5) for _____ from each modification of an existing emission source

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____ tpy

PEP of _____ = a + b = _____ tpy

(continued)

NOTE #1 - *Potential to emit.* The maximum capacity of an air contamination source to emit any regulated air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the emission source to emit a regulated air pollutant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as a part of the design if the limitation is enforceable by the department and the administrator. Fugitive emissions, to the extent that they are quantifiable, are included in determining the potential to emit where required by an applicable requirement. Secondary emissions (as defined in Part 231-4 of this Title) are not to be included when calculating an emission source's potential to emit. For emergency power generating stationary internal combustion engines, the potential to emit will be based on a maximum of 500 hours of operation per year per engine unless a more restrictive limitation exists in a permit or registration.

NOTE #2 - *Baseline actual emissions*. The annual rate of emissions of a regulated NSR contaminant from an emission source determined as follows:

(i) The average rate (as defined in Clauses a, b, c, and, d below), in tpy, at which an emission source physically emitted the contaminant during its baseline period, determined by using the source's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected baseline period.

(*a*) The average rate includes fugitive emissions to the extent quantifiable if the facility belongs to one of the source categories listed in Part 201-2.1(b)(21)(iii) of this Title, and emissions associated with startups, shutdowns, and malfunctions.

(*b*) The average rate must be adjusted downward to exclude any non compliant emissions that occurred while the emission source was operating above any applicable emission limitation.

(*c*) Except for electric utility steam generating units, the average rate must be adjusted downward to exclude any emissions that exceeded an emission limitation with which the emission source must currently comply, had such emission source been required to comply with such limitations during the baseline period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions rate need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G). For the purposes of a creditable emission increase or emission reduction credit used for netting, currently means at the time that the increase or reduction actually occurred.

(*d*) For a regulated NSR contaminant, when a project involves multiple emissions sources, one baseline period must be used to determine the baseline actual emissions of the emission sources being modified. A different baseline period cannot be used for each regulated NSR contaminant.

(ii) The applicant must use a reliable basis for quantifying the baseline actual emissions. Continuous emissions monitoring (CEM) data or stack test data approved by the department must be used if the facility is required to generate such data. If such data is not available, acceptable bases for quantifying baseline actual emissions include, but are not limited to, emission statements, EPA's AP-42 emission factors, and fuel and solvent purchase records, with department approval.

(continued)

NOTE #3 - *Projected actual emissions*. The maximum annual rate, in tpy, at which an existing emission source is projected to emit a regulated NSR contaminant in any one of the five years (12-month period) following the date the source commences operation after a modification, or in any one of the 10 years following that date if the project involves increasing the emission source's design capacity or its potential to emit that regulated NSR contaminant and full utilization of the emission source would result in exceeding the applicable significant project threshold in Tables 3, 4 or 6 of Subpart 231-13 of this Part or a significant net emissions increase at the major facility. Projected actual emissions are calculated only for existing major facilities.

(i) In determining the projected actual emissions as defined in this Section (before beginning actual construction), the owner or operator of the major facility:

(*a*) must consider all relevant information, including but not limited to, historical operational data, the facility's own representations, the facility's expected business activity and the facility's highest projections of business activity, the facility's filings with the State or federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and

(*b*) must include fugitive emissions to the extent quantifiable if the facility belongs to one of the source categories listed in Part 201-2.1(b)(21)(iii) of this Title, and emissions associated with startups and shutdowns; and

(*c*) may exclude, in calculating any increase in emissions that results from the particular project, that portion of the emission source's emissions following the project that the existing emission source could have accommodated during the consecutive 24 month period used to establish the baseline actual emissions and that are also unrelated to the particular project.

(ii) In lieu of using the method set out in Subparagraph (i) of this Paragraph, the owner or operator of the facility may elect to use the potential to emit of the emission source(s), in tpy.

SUBPARTS 231-5, 6, 7, 8, EXAMPLES

Subparts 231-5 & 6 Nonattainment (NA) Area NSR

- **Example A-1: Existing Major Facility Modification on Long Island with No Contemporaneous Modifications**
- **Example A-2: Existing Major Facility Modification on Long Island with Contemporaneous Modifications**
- **Example A-3: Existing Non-Major Facility Modification on Long Island**
- **Example A-4: Existing Major Facility Modification in Syracuse with No Contemporaneous Modifications**
- **Example A-5: Existing Major Facility Modification in Syracuse with Contemporaneous Modifications**
- **Example A-6: Existing Non-Major Facility Modification in Syracuse**

Subparts 231-7 & 8 Attainment Area NSR (PSD)

- **Example A-7: Existing Major Facility Modification**

Example A-1: Existing Major Facility Modification on Long Island with No Contemporaneous Modifications

Nonattainment Area NSR

Existing Facility PTE:

NOx: 40 tons
VOC: 5 tons
PM-2.5 30 tons
PM-2.5 Precursors
SO_2: 40 tons
NOx: 40 tons

Facility's NOx PTE is above the major facility threshold of 25 tpy and therefore is an existing major facility for NA contaminants (NOx, VOC, PM-2.5, and SO_2) based on facility location (see maps of nonattainment areas in Appendix B).

Modification PEP/NEI:	SPT:	SNEIT:
NOx: 45 tons	2.5 tons	25 tons
VOC: 4 tons	2.5 tons	25 tons
PM-2.5: 7 tons	10 tons	10 tons
PM-2.5 Precursors		
SO_2: 45 tons	40 tons	40 tons
NOx: 45 tons	40 tons	40 tons

NOx and VOC for severe ozone nonattainment evaluated on WKS-5A

PEP and NEI for NOx are greater than both the significant project and significant net emission increase thresholds and is subject to Subpart 231-6 for NOx. PEP for VOC is greater than the significant project threshold but NEI is less than the significant net emission increase threshold so only sections 231-6.2 and 231-11.1 netting requirements apply to VOC.

PM-2.5, SO_2, and NOx for PM-2.5 nonattainment evaluated on WKS-6

PEP for PM-2.5 is less than the significant project threshold and therefore not subject to Subpart 231-6, however, the facility must still comply with the section 231-11.2 reasonable possibility provisions for PM-2.5. PEP and NEI for SO_2 and NOx are both above the significant project and significant net emission increase thresholds and, therefore, subject to Subpart 231-6.

Example A-2: Existing Major Facility Modification on Long Island with Contemporaneous Modifications

Nonattainment Area NSR

Existing Facility PTE:

NOx:	50 tons
VOC:	20 tons
PM-2.5:	10 tons
PM-2.5 Precursors	
SO_2:	35 tons
NOx:	50 tons

Recent creditable emission increases and emission reduction credits at the facility:

7/1/10 decrease:		1/1/09 increase:	
NOx:	22 tons	NOx:	20 tons
VOC:	3 tons	VOC:	7 tons
PM-2.5:	2 ton	PM-2.5:	4 tons
PM-2.5 Precursors		PM-2.5 Precursors	
SO_2:	15 tons	SO_2:	15 tons
NOx:	7 tons	NOx:	20 tons

Facility's NOx PTE is above the major facility threshold of 25 tpy and therefore is an existing major facility for NA contaminants (NOx, VOC, PM-2.5, and SO_2) based on facility location (see maps of nonattainment areas in Appendix B).

Project scheduled to commence construction on 10/1/13 and commence operation on 3/1/14.

Modification PEP:		SPT:	Modification NEI (PEP+CEI-ERC)	SNEIT:
NOx:	45 tons	2.5 tons	45 + N/A - 22 = 23 tons	25 tons
VOC:	5 tons	2.5 tons	5 + N/A - 3 = 2 tons	25 tons
PM-2.5:	5 tons	10 tons	N/A (PEP < SPT)	10 tons
PM-2.5 Precursors				
SO_2:	20 tons	40 tons	N/A (PEP < SPT)	40 tons
NOx:	45 tons	40 tons	45 + 20 - 23 = 43 tons	40 tons

NOx and VOC for severe ozone nonattainment evaluated on WKS-5A

Contemporaneous period starts at the beginning of the calendar year which is four calendar years prior to the calendar year in which the proposed modification is scheduled to commence operation and finishes at the end of the calendar year the proposed modification is scheduled to commence operation.

Contemporaneous period: 1/1/10 to 12/31/14

PEP for NOx and VOC are greater than the significant project threshold but below the significant net emission increase threshold and, therefore, subject to sections 231-6.2 and 231-11.1 for netting.

PM-2.5, SO_2, and NOx for PM-2.5 nonattainment evaluated on WKS-6

Contemporaneous period starts on the date five annual periods (1825 consecutive days) prior to the date construction of the proposed modification is scheduled to commence and ends on the date the proposed modification is scheduled to commence operation.

Contemporaneous period: 10/1/08 to 3/1/14

PEP and NEI for NOx are greater than both the significant project and significant net emission increase thresholds and is subject to Subpart 231-6. PEP for PM-2.5 and SO_2 are below significant project thresholds and are not subject to Subpart 231-6, however, the modification must comply with the reasonable possibility provisions in section 231-11.2.

Example A-3: Existing Non-Major Facility Modification on Long Island Nonattainment Area NSR

Existing Facility PTE:		MFT
NOx:	20 tons	25 tons
VOC:	7 tons	25 tons
PM-2.5:	5 tons	100 tons
PM-2.5 Precursors		
SO_2:	25 tons	100 tons
NOx:	20 tons	100 tons

Facility's PTE is below the major facility threshold for all NA contaminants (NOx, PM-2.5, VOC, and SO_2) and therefore is an existing non-major facility (not allowed to net out of NSR applicability).

Modification PEP:

NOx:	75 tons
VOC:	20 tons
PM-2.5:	40 tons
PM-2.5 Precursors	
SO_2:	105 tons
NOx:	75 tons

NOx and VOC for severe ozone nonattainment evaluated on WKS-8

PEP for NOx is greater than the major facility threshold and is subject to Subpart 231-5. PEP for VOC is less than the major facility threshold and is not subject to Subpart 231-5 however the facility potential to emit after the modification is greater than the major facility threshold and an emission limit (in tons per year) for VOC with the new potential to emit is required in the permit.

PM-2.5, SO_2, and NOx for PM-2.5 nonattainment evaluated on WKS-9

PEP for PM-2.5 and NOx are less than the major facility threshold and are not subject to 231-5. PEP for SO_2 is greater than the major facility threshold and is subject to Subpart 231-5.

Example A-4: Existing Major Facility Modification in Syracuse with No Contemporaneous Modifications

Nonattainment Area NSR

Existing Facility PTE:
NOx: 140 tons
VOC: 25 tons

Facility's NOx PTE is above the major facility threshold of 100 tpy and therefore is an existing major facility for NA contaminants (NOx and VOC) based on facility location (see maps of nonattainment areas in Appendix B).

Modification PEP/NEI:		SPT/SNEIT:
NOx:	45 tons	40 tons
VOC:	4 tons	40 tons

NOx and VOC for attainment portion of the ozone transport region evaluated on WKS-7
PEP and NEI for NOx are greater than both the significant project and significant net emission increase thresholds and is subject to Subpart 231-6. PEP and NEI for VOC are below the significant project threshold and is not subject to 231-6 however the facility must still comply with section 231-11.2 reasonable possibility provisions.

Example A-5: Existing Major Facility Modification in Syracuse with Contemporaneous Modifications

Nonattainment Area NSR

Existing Facility PTE:
NOx: 150 tons
VOC: 25 tons

Recent emission reduction credits at the facility:
1/1/10 decrease:
NOx: 20 tons
VOC: 3 tons

Facility's NOx PTE is above the major facility threshold of 100 tpy and therefore is an existing major facility for NA contaminants (NOx and VOC) based on facility location (see maps of nonattainment areas in Appendix B).

Project scheduled to commence construction on 10/1/13 and commence operation on 3/1/14.

Modification PEP:		SPT	Modification NEI (PEP+CEI-ERC)	SNEIT
NOx:	50 tons	40 tons	50 + N/A - 20 = 30 tons	40 tons
VOC:	5 tons	40 tons	N/A (PEP < SPT)	40 tons

NOx and VOC for attainment portion of the ozone transport region evaluated on WKS-7
Contemporaneous period starts on the date five annual periods (1825 consecutive days) prior to the date construction of the proposed modification is scheduled to commence and ends on the date the proposed modification is scheduled to commence operation
Contemporaneous period: 10/1/08 to 3/1/14
PEP for NOx is greater than the significant project but less than the significant net emission increase thresholds and therefore subject to sections 231-6.2 and 231-11.1 for netting. PEP for VOC is below significant project threshold and is not subject to Subpart 231-6 however must comply with the reasonable possibility provisions in section 231-11.2.

Example A-6: Existing Non-Major Facility Modification in Syracuse Nonattainment Area NSR

Existing Facility PTE:		MFT:
NOx:	70 tons	100 tons
VOC:	40 tons	50 tons

Facility's PTE is below the major source threshold for all NA contaminants and, therefore, is an existing non-major facility.

Modification PEP:

NOx:	125 tons
VOC:	20 tons

NOx and VOC for attainment portion of the ozone transport region evaluated on WKS-10

PEP for NOx is greater than the major facility threshold and, therefore, is subject to Subpart 231-5. PEP for VOC is less than the major facility threshold and, therefore, is not subject to Subpart 231-5, however, the facility potential to emit for VOC after the modification is greater than the major facility threshold and a permit limit with the new potential to emit is required in the permit.

Example A-7: Existing Major Facility Modification

Attainment Area NSR

Existing Facility PTE:

CO:	20 tons		
SO_2:	30 tons		
Greenhouse Gases		GWP:	
CO_2:	90,000 tons	CO_2:	1
CH_4:	1 ton	CH_4:	21
N_2O:	1 ton	N_2O:	310
SF_6:	0.5 tons	SF_6:	23,900
GHG_m:	90,000 + 1 + 1 + 0.5 = 90,002.5 tons		
GHG_e:	(90,000)(1) + (1)(21) + (1)(310) + (0.5)(23,900) = 102,281 tons CO_2e		

Facility's GHG PTE is above the major facility threshold of 100,000 tpy CO_2e and 100 tpy and, therefore, is an existing major facility for the purposes of PSD.

	Modification PEP/NEI:	SPT/SNEIT:
CO:	30 tons	100 tons
SO_2:	45 tons	40 tons
Greenhouse Gases		
CO_2:	140,000 tons	N/A
CH_4:	2 tons	N/A
N_2O:	0.5 tons	N/A
SF_6:	no increase	N/A
GHG_m:	140,000 + 2 + 0.5 + 0 = 140,002.5 tons	any increase
GHG_e:	(140,000)(1) + (2)(21) + (0.5)(310) + (0)(23,900) = 140,197 tons CO_2e	75,000 tons CO_2e

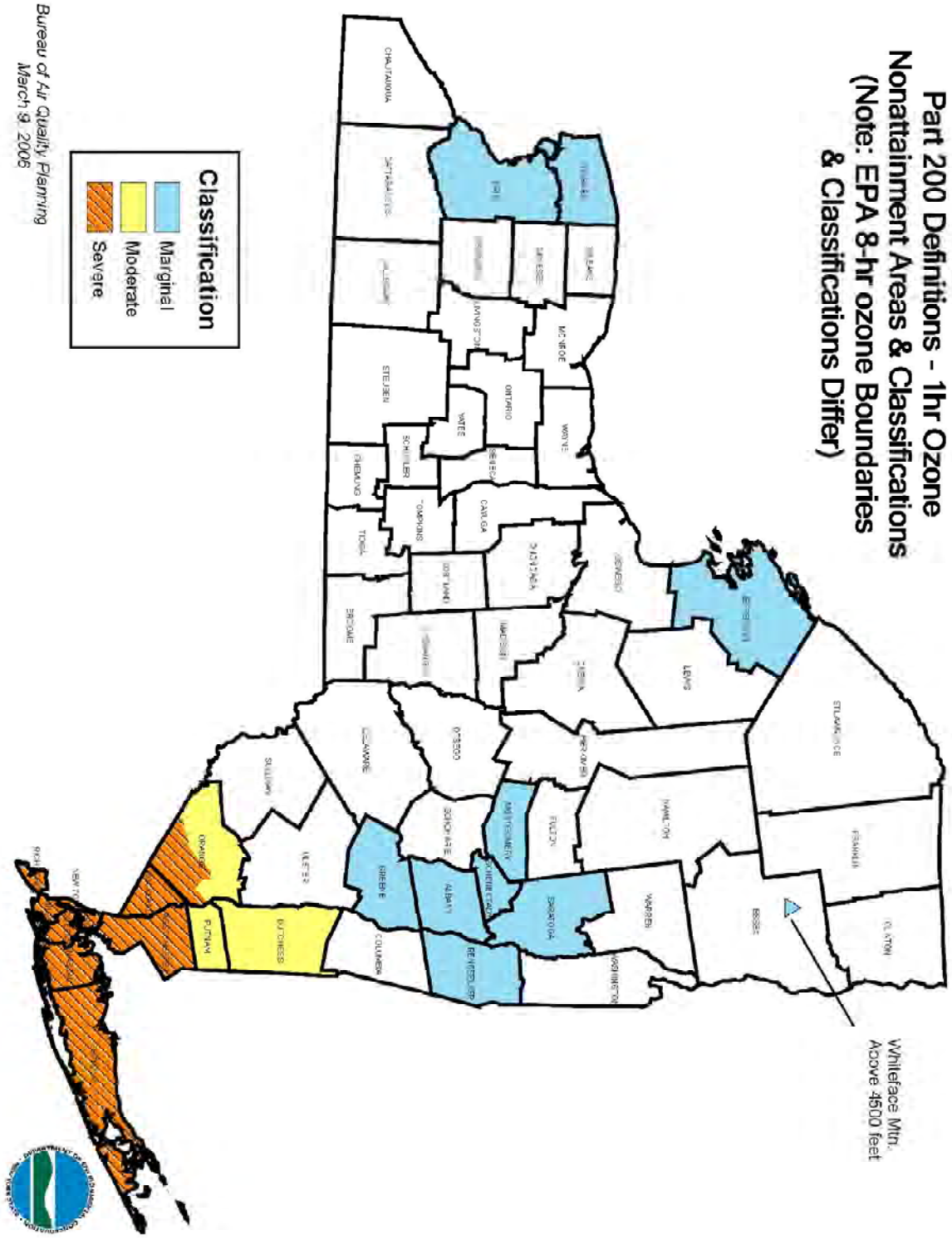
PSD contaminants evaluated on WKS-16

PEP and NEI for SO_2 and GHGs are above the applicable significant project and significant net emission increase thresholds and, therefore, subject to Subpart 231-8. PEP and NEI for CO are below the applicable significant project thresholds and, therefore, not subject to Subpart 231-8 however the facility must comply with the reasonable possibility provisions of 231-11.2.

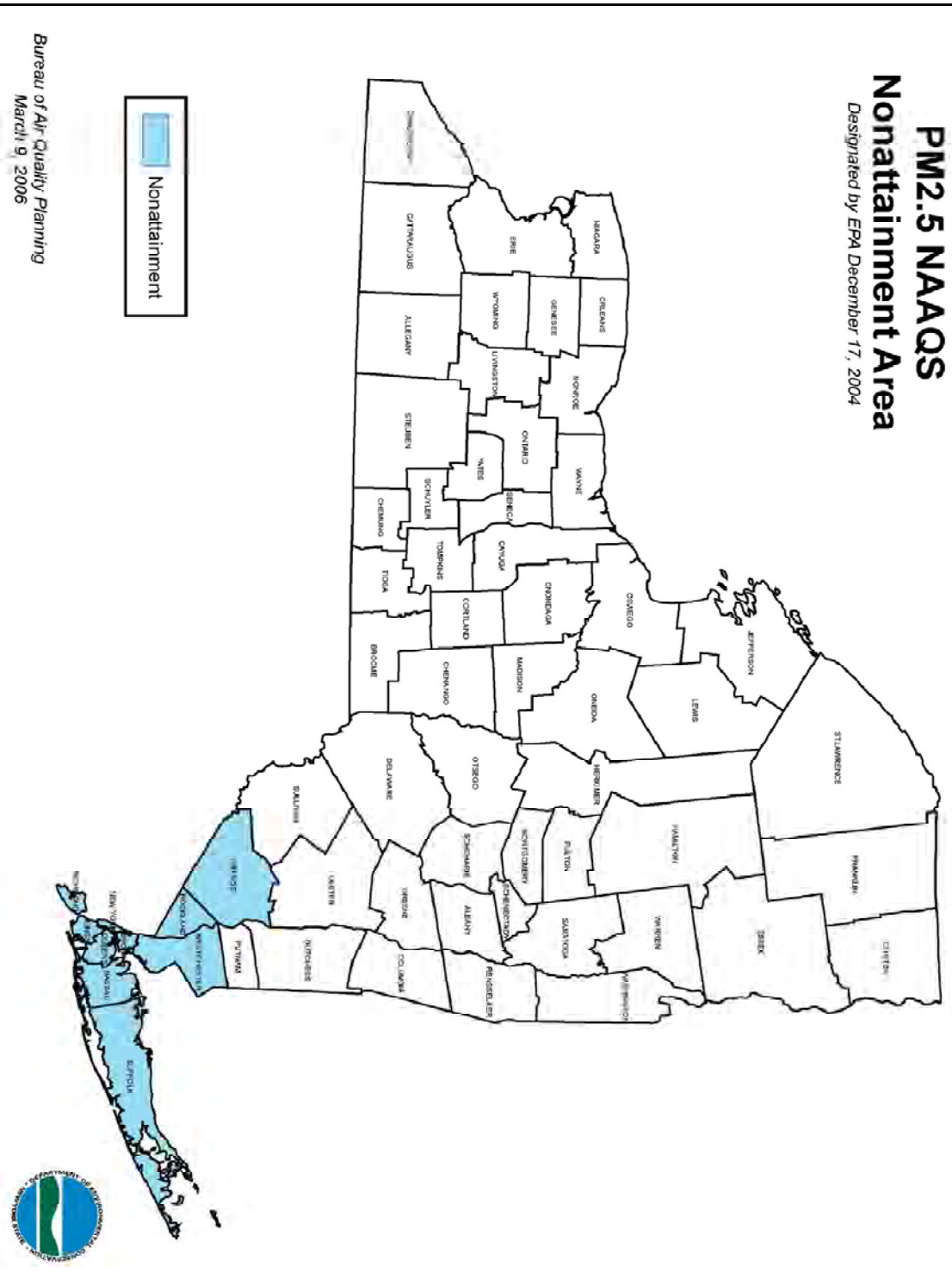
SUBPARTS 231-5 & 6, MAPS OF NONATTAINMENT AREAS IN NEW YORK

- **Appendix B-1: 1-Hour Ozone Nonattainment Map**
- **Appendix B-2: PM-2.5 Nonattainment Map**
- **Appendix B-3: PM-10 Nonattainment Map**

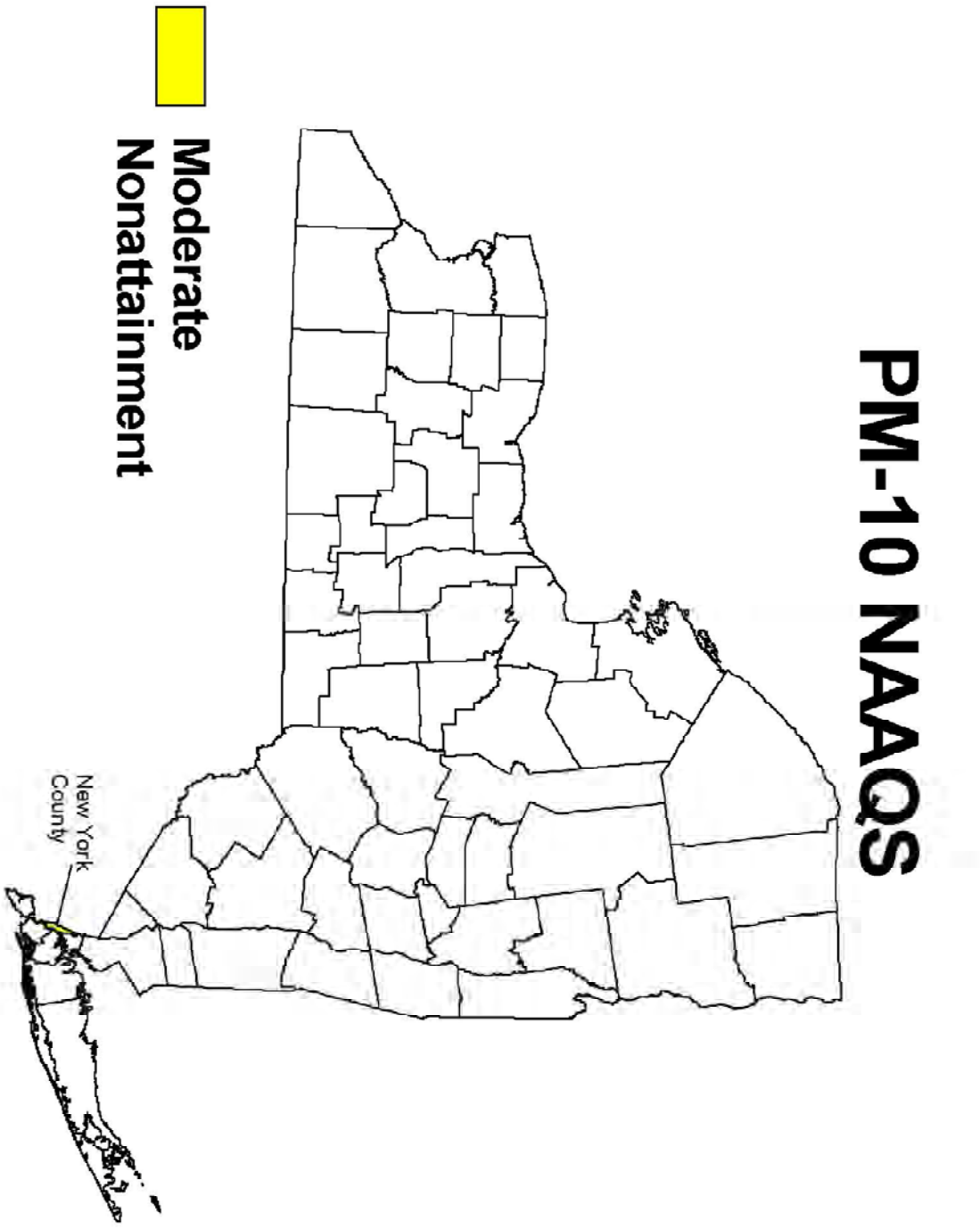
Appendix B-1: 1-Hour Ozone Nonattainment Map



Appendix B-2: PM-2.5 Nonattainment Map



Appendix B-3: PM-10 Nonattainment Map



SUBPARTS 231-7 & 8, SOURCE CATEGORY LIST
Coal Cleaning plants (with thermal dryers)
Kraft pulp mills
Portland cement plants
Primary zinc smelters
Iron and steel mills
Primary aluminum ore reduction plants
Primary copper smelters
Municipal incinerators capable of charging more than 50 tons of refuse per day
Hydrofluoric, sulfuric or nitric acid plants
Petroleum refineries
Lime plants
Phosphate rock processing plants
Coke oven batteries
Sulfur recovery plants
Carbon black plants (furnace process)
Primary lead smelters
Fuel conversion plants
Sintering plants
Secondary metal production plants
Chemical process plants (excluding ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140
Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input
Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels
Taconite ore processing plants
Glass fiber processing plants
Charcoal production plants
Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input

SUBPARTS 231-7 & 8, REGULATED NSR CONTAMINANTS, SIGNIFICANT PROJECT/SIGNIFICANT NET EMISSION INCREASE THRESHOLDS

Regulated NSR Contaminant	Significant Project Threshold[1]/Significant Net Emission Increase Threshold
Carbon monoxide	100 tpy
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy
Particulate matter: PM-10 emissions[2]	15 tpy
Particulate matter: PM-2.5 emissions[2]	10 tpy
Ozone: as VOCs or NOx	40 tpy
Lead (elemental)	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H2S)	10 tpy
Total reduced sulfur (including H2S)	10 tpy
Reduced sulfur compounds (including H2S)	10 tpy
Municipal waste combustor organics (measured as total tetra through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.2 x 10-6 megagrams per year (3.5 x 10-6 tpy)
Municipal waste combustor metals (measured as particulate matter)	14 megagrams per year (15 tpy)
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	36 megagrams (40 tpy)
Municipal solid waste landfills emissions (measured as nonmethane organic compounds)	45 megagrams (50 tpy)
Greenhouse Gas	Any increase and 75,000 tpy[3]
Any other regulated NSR contaminant	Any increase

[1]- project emission potential threshold
[2]- both filterable and condensible fractions are to be included (see definitions of PM-10 and PM-2.5 in Part 200 of this Title).
[3]- measured as CO_2 equivalents

SUBPARTS 231-7 & 8, GLOBAL WARMING POTENTIAL VALUES FOR CALCULATING CO_2 EQUIVALENTS

Greenhouse Gas	Global Warming Potential
CO_2	1
CH_4	21
N_2O	310
SF_6	23,900
Hydrofluorocarbons	12 to 11,700[1]
Perfluorocarbons	6,500 to 9,200[1]

To calculate GHG emissions based on mass, the mass emissions of each of the greenhouse gases is totaled together.

To calculated GHG emissions based on CO_2 equivalents, the mass emissions of each of the greenhouse gases is multiplied by their respective global warming potential to get emissions on a basis of CO_2 equivalents and then the CO_2 equivalents are summed across all of the greenhouse gases emitted (See Example A-7).

[1] see 74 FR 56395-56396, Table A-1, for specific values for Hydrofluorocarbons and Perfluorocarbons