PART 231 New Source Review for New and Modified Facilities (effective 2/25/21) Applicability Worksheets

TABLE OF CONTENTS

Acronyms Used in Part 231 Worksheets Preface

SUBPARTS 231-5 & 6 Nonattainment Area NSR Applicability

Worksheet (WKS) Number	Description
WKS-1	Facility Type/Applicability Determination Worksheet
WKS-2	Proposed New Facility in an Ozone NA Area or Attainment Portion of the Ozone Transport Region (VOC & NOx) – Applicability Worksheet
WKS-3	Proposed New Facility in a PM-10 NA area – Applicability Worksheet
WKS-4	Existing Facility – Applicability Worksheet
WKS-5A	Existing Major Facility Modification – Severe Ozone NA area – Applicability Worksheet
WKS-5B	Special Rules For Severe Ozone NA Area (VOC & NOx) – Applicability Worksheet
WKS-6	Existing Major Facility Modification – PM-10 NA area – Applicability Worksheet
WKS-7	Existing Major Facility Modification – Marginal/Moderate Ozone NA Areas or Attainment Portion of the Ozone Transport Region – Applicability Worksheet
WKS-8	Existing Non-Major Facility Modification – Severe Ozone NA Area – Applicability Worksheet
WKS-9	Existing Non-Major Facility Modification – PM-10 NA Area – Applicability Worksheet
WKS-10	Existing Non-Major Facility Modification – Marginal/Moderate Ozone NA Areas or Attainment Portion of the Ozone Transport Region – Applicability Worksheet
WKS-11	Facility Potential To Emit Calculation Worksheet
WKS-12	Project Emission Potential Calculation Worksheet
WKS-13A	Net Emission Increase Analysis Worksheet
WKS-13B	Contemporaneous Creditable Emission Increases/Emission Reduction Credits Worksheet

SUBPARTS 231-7 & 8 Attainment Area NSR (PSD) Applicability

WKS-14	Facility Type/Applicability Determination Worksheet
WKS-15	Proposed New Facility – Applicability Worksheet
WKS-16	Existing Facility Modification – Applicability Worksheet
WKS-17	Existing Major Facility Modification – Applicability Worksheet
WKS-18	Existing Non-Major Facility Modification – Applicability Worksheet
WKS-19	Facility Potential to Emit Calculation Worksheet
WKS-20	Project Emission Potential Calculation Worksheet
WKS-21A	Net Emission Increase Analysis Worksheet
WKS-21B	Contemporaneous Creditable Emission Increases/Emission Reduction Credits Worksheet

Appendices

Appendix A	Examples
Appendix B	Maps of Nonattainment Areas in New York
Appendix C	Source Category List
Appendix D	Regulated NSR Contaminants, Significant Project/Significant Net Emission Increase Thresholds
Appendix E	Global Warming Potential Values for Calculating CO ₂ Equivalents

Acronyms Used in Part 231 Worksheets

- 1) BAE Baseline Actual Emissions
- 2) BACT Best Available Control Technology
- 3) CO₂ Carbon Dioxide
- 4) CO₂e Carbon Dioxide Equivalents
- 5) CO Carbon Monoxide
- 6) CFR Code of Federal Regulations
- 7) CEI Creditable Emission Increase
- 8) ES Emission Source
- 9) ERC Emission Reduction Credits
- 10) FC Flowchart
- 11) GHG Greenhouse Gas
- 12) GHG_e Greenhouse Gas measured by CO₂ equivalents
- 13) GHG_m Greenhouse Gas measured by mass
- 14) LAER Lowest Achievable Emission Rate
- 15) MFT Major Facility Threshold
- 16) NA Nonattainment
- 17) NEI Net Emission Increase
- 18) NOx Oxides of Nitrogen
- 19) NSR New Source Review
- 20) OTR Ozone Transport Region
- 21) PAE Projected Actual Emissions
- 22) PEP Project Emission Potential
- 23) PM Particulate Matter
- 24) PM-10 Particulate Matter less than 10 micrometers
- 25) PM-2.5 Particulate Matter less than 2.5 micrometers
- 26) PSD Prevention of Significant Deterioration
- 27) PTE Potential to Emit
- 28) SNEIT Significant Net Emission Increase Threshold
- 29) SO₂ Sulfur Dioxide
- 30) SPT Significant Project Threshold
- 31) TPY Tons per Year
- 32) VOC Volatile Organic Compounds
- **33)** WKS Worksheet

Preface

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

- Nonattainment NSR (Subparts 231-5 & 6)
 - New major facility or modification to an existing non-major 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 for that location and the project's emissions are compared to the applicable significant project thresholds
- Attainment (PSD) NSR (Subparts 231-7 & 8)
 - New major facility or modification to an existing non-major 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 the project's emissions of all other applicable PSD contaminant(s) are compared to the applicable significant project threshold(s)
 - Existing major facility (Subpart 231-8)
 - The facility is considered to be major for all PSD contaminants and the project's emissions are compared to the applicable significant project thresholds

Subparts 231-5 & 6 NA Area NSR Applicability

YSDEC-DAR	WKS-1 (SEE FC-1)			Page 1 of 2
SUBPARTS	231-5 & 6, FACILITY TYPE/APPLICABILITY DETERMINATION WOR	KSH	EET	
ADDRESS:_ APPLICATIO COUNTY: PROPOSED	ME:N DEC ID# PROJECT DESCRIPTION:			
	OURCE ID#s,,,,,,,	_,		
PREPARER'S		TLE \TE		/
REVIEWER'S	S NAME REGION # DATE	/	/	
		Υ	Ν	ACTION
1. NA contar	ninant review. For PSD applicability go to WKS-14			Go to 2
Appendix B):	A contaminants based on facility location (See NOTE #1 and maps in 0x PM-10			Go to 3
3. Is a new fa	acility with emissions of any NA contaminant being proposed?			YES – Go to 4
				NO – Go to 5
4. Follow ead	ch applicable path			Ozone NA – go to WKS-2
				PM 10 – go to WKS-3
5. Is a modif	cation, see NOTE #2, being proposed to an existing facility?			YES – Go to WKS-4
				NO – See NOTE #3
COMMENTS	All of New York State is within the Ozone Transport Region as design Therefore, VOC and NOx are treated as nonattainment contaminan			
NOTE #2 -	Modification 231-4.1(b)(30). Any physical change in, or change in the which results in a level of annual emissions (not including any emissions Baseline Actual Emissions of any Regulated NSR Contaminant emision the emission of any Regulated NSR Contaminant not previously explored the following:	e met sion re tted b	thod c educti y sucl	of operation of, a facility ons) in excess of the h facility or which results
	(i) routine maintenance, repair, or replacement as defined in 6 N	YCRF	R Part	200.
	(ii) use of an alternative fuel or raw material by reason of an orde Energy Supply and Environmental Coordination Act of 1974 (or a reason of a natural gas curtailment plan pursuant to the Federal	any su	perse	eding legislation) or by
	(iii) use of an alternative fuel by reason of an order or rule under	sectio	on 125	5 of the Clean Air Act;
	(iv) use of an alternative fuel at a steam generating unit to the ex municipal solid waste;	tent th	nat the	e fuel is generated from
	(v) use of an alternative fuel or raw material by a facility which:			
continued)				

NYSDEC-DAR	WKS-1	Page 2 of 2
	(a) the facility was capable of accommodating before January 6, 1975, unless would be prohibited under any federally enforceable permit condition which wa after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved CFR Part 51 Subpart I or 40 CFR 51.166; or	is established
	(<i>b</i>) the facility is approved to use, pursuant to this Part, or which is included in pursuant to 40 CFR 52.21.	a permit issued
	(vi) an increase in the hours of operation or in the production rate, unless such cha prohibited under any permit condition which was established after January 6, 1975 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 Subpart I or	, pursuant to 40
	(vii) any change in ownership at a facility.	
NOTE #3 -	Not subject to Subparts 231-5 or 6, however, project may be subject to the notifical of subdivision 231-3.5(c) if the applicant determines that the proposed project does <i>modification</i> because all the project emission increases are attributable to independence with clause $231-4.1(b)(42)(i)(c)$.	s not constitute a

WKS-2 (SEE FC-2)

FACILITY NAM				
APPLICATION	I DEC ID#			
		Y	N	ACTION
1. Is proposed	I facility located in Severe Ozone NA area? (See Appendix B-1)			YES - Go to 2
				NO - Go to 3
	NOx, is facility PTE ≥ MFT? (Use WKS-11 for calculating PTE) tpy ≥ 25 tpy? tpy ≥ 25 tpy?			YES - See NOTE #1, go to 4
	(y = 20 (y) :			NO - See NOTE #2
	acility is located in Marginal/Moderate ozone NA areas or in the tion of the OTR. For VOC or NOx, is the facility PTE \geq MFT? (Use localized BTE)			YES - See NOTE #3, go to 4
VOC (PTE)	tpy ≥ 50 tpy? tpy ≥ 100 tpy?			NO - See NOTE #2
	blicant complied with all of the following permit requirements (Re:			YES - See NOTE #4
b. Submi c. Submi 231-5. d. Submi 231-5.	iance certification (Re: subdivision 231-5.2(a)). ttal of a benefit analysis (Re: subdivision 231-5.2(b)). ttal of a LAER demonstration (Re: subdivision 231-5.2(c) and section 4). ttal of an air quality impact evaluation, if required (Re: subdivision 2(d)).			NO - See NOTE #5
	ication of emission sources providing emission offsets and submittal ies of modified permits for the emission sources (Re: subdivision 2(d)).			
NOTE #1 -	Major facility subject to Subpart 231-5 for each NA contaminant for v	vhich	facilit	y PTE ≥ MFT.
	LAER control technology required for each emission source which is and which emits any such NA contaminant.	s part	of the	e proposed major facility
	Emission offset [†] required for the entire amount of the facility PTE tim contaminant: For VOC & NOx: 1.3:1 offset ratio	nes of	fset r	atio for each such NA
NOTE #2 -	Non-major facility, not subject to Subpart 231-5 for VOC or NOx.			
NOTE #3 -	Major facility subject to Subpart 231-5 for each NA contaminant for v	vhich	facilit	y PTE ≥ MFT.
	LAER control technology required for each emission source which is and which emits any such NA contaminant.	s part	of the	e proposed major facility
	Emission offset [†] required for the entire amount of the facility PTE tim contaminant. For VOC & NOx: 1.15:1 offset ratio	nes of	fset r	atio for each such NA
NOTE #4 -	Detailed NA review may proceed.			
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)

SUBPART 231-5, PROPOSED NEW FACILITY IN A PM-10 NA AREA – APPLICABILITY WORKSHEET				
FACILITY NAME: APPLICATION DEC ID#				
	Y	N	ACTION	
 For PM-10, is facility PTE ≥ MFT? (Use WKS-11 for calculating PTE) PM-10 (PTE) tpy ≥ 100 tpy? 			YES - See NOTE #1, go to 2	
			NO - See NOTE #2	
Has the applicant complied with all of the following permit requirements (Re: section 231-5.2):			YES - See NOTE #3	
 a. Compliance certification (Re: subdivision 231-5.2(a)). b. Submittal of a benefit analysis (Re: subdivision 231-5.2(b)). 			NO - See NOTE #4	
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: subdivision 231-5.2(e)).				
 e. Identification of emission sources providing emission offsets and submittal of copies of modified permits for the emission sources (Re: subdivision 231-5.2(e)). 				
NOTE #1 - Major facility subject to Subpart 231-5 for PM-10.				
LAER control technology required for each emission source which is and which emits PM-10.	s part	of the	e proposed major facility	
Emission offset [†] required for the entire amount of the facility PTE of air quality benefit analysis	PM-1	0 at a	a 1:1 offset ratio and a net	
NOTE #2 - Non-major facility, not subject to Subpart 231-5.				
NOTE #3 - Detailed NA review may proceed.				
NOTE #4 - 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)

WKS-4 (SEE FC-4)

SUBPARTS 231-5 & 6, EXISTING FACILITY – APPLICABILITY WORKSHEET				
FACILITY NAME: APPLICATION DEC ID#				
			-	
	Y	Ν	ACTION	
1. Is a modification being proposed? (Re: paragraph 231-4.1(b)(30) and NOTE #1 on WKS-1)			YES - Go to 2	
			NO - see NOTE #1	
 Identify NA contaminant(s) based on existing facility location (See maps in Appendix B). Ozone Precursors: VOC NOx PM-10 			Go to 3	
3. For any identified NA contaminant, is the existing facility's PTE \geq MFT? * (Use			YES - Go to 4	
WKS-11 for calculating PTE) Severe Ozone NA Area:			NO - Go to 5	
VOC (PTE) tpy \ge 25 tpy?			NO - G0 10 5	
NOx (PTE) tpy ≥ 25 tpy?				
Marginal/Moderate Ozone NA or attainment portion of the OTR: VOC (PTE) tpy ≥ 50 tpy?				
NOx (PTE) tpy \ge 100 tpy?				
PM-10 NA Area:				
PM-10 (PTE) tpy ≥ 100 tpy?				
4. Major facility, follow each applicable path.			Severe Ozone NA – WKS-5A	
			PM-10 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 – WKS-8	
			PM-10 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 subdivision	231-3	8.5(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 OZO WORKSHEET	DNE N/	A ARI	EA – APPLICABILITY
FACILITY NAME APPLICATION DEC ID# EMISSION SOURCE. ID#S			
,,, _,, _	<u> </u>	Ν	ACTION
 Major facility. For VOC or NOx, is PEP ≥ SPT?* (Use WKS-12 for calculating PEP) 			YES - Go to 2
$VOC (PEP) _ tpy \ge 2.5 tpy?$ $NOx (PEP) _ tpy \ge 2.5 tpy?$			NO - See NOTE #1
 Has a NEI analysis been provided by the applicant? (Re: paragraph 231- 4.1(b)(31)) 			YES - Go to 3
			NO - See NOTE #2
3. For VOC or NOx, is NEI > SNEIT?* (Use WKS-13A & B for calculating NEI) VOC (NEI) tpy > 25 tpy? NOx (NEI) tpy > 25 tpy?			YES - See NOTE #3, go to 4
VOX (IVEI) (by > 25 (by))			NO - See NOTE #4
4. Has the applicant complied with all of the following permit requirements (Re: section 231-6.3):			YES - See NOTE #5
 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: subdivision 231-6.3(d)))		NO - See NOTE #2
e. Identification of emission sources providing internal offset or emission offset and submittal of copies of modified permits for the emission sources (Re: subdivision 231-6.3(d)).			
NOTE #1 - Not subject to Subpart 231-6 review, however, must comply with a reasonable possibility requirements for insignificant modifications.	pplicat	ole se	ction 231-11.2
NOTE #2 - Notice of incomplete application should be sent.			
NOTE #3 - Modification subject to Subpart 231-6 for each NA contaminant for SNEIT.	which	the m	nodification's NEI >
Control technology and emission offset [†] required as provided in sp	ecial r	ules (see WKS-5B)
NOTE #4 - Must comply with applicable sections 231-6.2 and 231-11.1 Netting	g requi	remer	nts.
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).

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	-6, SPECIAL RULES FOR SEVERE OZONE NA AREA (VOC & NO (Re: subdivision 231-6.1(d))	9x) – A	\PPL I	CABILITY
FACILITY NAM APPLICATION EMISSION SO		_,		
		Y	Ν	ACTION
	rom WKS-5A NOTE #3, for a modification located in Severe Ozone here NEI > SNEIT (25 tpy) for VOC or NOx, as applicable.		_	Go to 2
VOC (PTĚ)	acility PTE ≥ 100 tpy? (Use WKS-11 for calculating Facility PTE) tpy ≥ 100 tpy?			YES - Go to 3
NOx (PTE)	tpy ≥ 100 tpy?			NO - Go to 4
	subject to Subpart 231-6 for VOC or NOx, as applicable. Has osed to internally offset the PEP of VOC or NOx at 1.3:1?			YES - See NOTE #1
				NO - See NOTE #2
	subject to Subpart 231-6 for VOC or NOx, as applicable. Has predeted to internally offset the PEP of VOC or NOx at 1.3:1?			YES - See NOTE #3
	,			NO - See NOTE #4
NOTE #1 -	The modification is exempt from the requirement for application of L emission offset but is fully subject to all other applicable Part 231 red			
NOTE #2 -	Emission offset required for the PEP of VOC or NOx, as applicable, control technology required for each emission source which is part of 5A.			
NOTE #3 -	The proposed emission increase shall not be considered as a modif NSR permit under Part 231, however, all applicable permitting requi Also, all applicable requirements of Subpart 231-10 pertaining to ER offset purposes shall apply. Go to 4 in WKS-5A.	remei	nts of	Part 201 shall apply.
NOTE #4 -	Emission offset required for the PEP of VOC or NOx, as applicable, BACT shall be substituted for LAER control technology required for of the modification. Go to 4 in WKS-5A.			

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WKS-6 (SEE FC-6)

SUBPART 231-6, EXISTING MAJOR FACILITY MODIFICATION – PM-10 NA ARE WORKSHEET	A – A	\PPL	ICABILITY
FACILITY NAME APPLICATION DEC ID# EMISSION SOURCE. ID#S,,,	_,		
	Y	Ν	ACTION
1. Major facility. For PM-10, is PEP \ge SPT? (Use WKS-12 for calculating PEP) PM-10 (PEP) tpy \ge 15 tpy?			YES - Go to 2 NO - See NOTE #1
 Has a NEI analysis been provided by the applicant? (Re: paragraph 231- 4.1(b)(31)) 			YES - Go to 3
			NO - See NOTE #2
 For PM-10, is NEI ≥ SNEIT? (Use WKS-13A & B for calculating NEI) 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):			YES - See NOTE #5
 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: subdivision 231-6.3(e)) e. Identification of emission sources providing emission offsets and submittal of copies of modified permits for the emission sources (Re: subdivision 231-6.3(e)). 			NO - See NOTE #2
NOTE #1 - Not subject to Subpart 231-6 review, however, must comply with appreasonable possibility requirements for insignificant modifications.	olicab	le se	ction 231-11.2
NOTE #2 - Notice of incomplete application should be sent.			
NOTE #3 - Modification subject to Subpart 231-6.			
LAER control technology required for each emission source which is emits PM-10.	s part	of the	e modification and which
Emission offset [†] required for the entire amount of the PEP. For PM-10: 1:1 offset ratio and a net air quality benefit analysis (mod subdivision231-6.6(d))	deling	ı) requ	uired (Re:
NOTE #4 - Must comply with applicable sections 231-6.2 and 231-11.1 Netting r	requii	remer	nts.
NOTE #5 - Detailed NA review may proceed.			

[†] 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).

WKS-7 (SEE FC-7)

FACILITY NAME			
EMISSION SOURCE. ID#S,,,,,,,,,	,		1
	Y	Ν	ACTION
 Major facility. For VOC or NOx, is PEP ≥ SPT?* (Use WKS-12 for calculating 			YES - Go to 2
PEP) VOC (PEP) tpy ≥ 40 tpy?			NO - See NOTE #1
NOx (PEP) tpy \ge 40 tpy?			
2. Has a NEI analysis been provided by the applicant? (Re: paragraph 231-			YES - Go to 3
4.1(b)(31))			
			NO - See NOTE #2
3. For VOC or NOx, is NEI > SNEIT?* (Use WKS-13A & B for calculating NEI) VOC (NEI) tpy > 40 tpy?			YES - See NOTE #3, go to 4
NOx (NEI) tpy > 40 tpy?			NO - See NOTE #4
4. Hea the applicant complied with all of the following permit requirements (Dec			YES - See NOTE #5
4. Has the applicant complied with all of the following permit requirements (Re: section 231-6.3):			1ES - See NOTE #5
 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 and section 231-6.5) d. Submittal of an air quality impact evaluation, if required. (Re: subdivision 231-6.3(d)) e. Identification of emission sources providing emission offsets and submitted for the emission contract of the emission offsets and submitted for the emission contract. 			NO - See NOTE #2
of copies of modified permits for the emission sources (Re: subdivision 231-6.3(d)).			
NOTE #1 - Not subject to Subpart 231-6 review, however, must comply with reasonable possibility requirements for insignificant modifications		ole se	ction 231-11.2
NOTE #2 - Notice of incomplete application should be sent.			
NOTE #3 - Modification subject to Subpart 231-6 for each NA contaminant f SNEIT.	or which	the m	nodification's NEI ≥
LAER control technology required for each emission source whice emits any such NA contaminant.	h is part	of the	e modification and which
Emission offset [†] at a ratio of 1.15:1 required for the entire amour contaminant.	it of the I	PEP f	or each such NA
NOTE #4 - Must comply with applicable sections 231-6.2 and 231-11.1 Nett	ng requi	remer	nts.
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).

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SUBPART 231-5, EXISTING NON-MAJOR FACILITY MODIFICATION – SEVERE OZONE NA AREA – APPLICABILITY WORKSHEET					
FACILITY NAME APPLICATION DEC ID# EMISSION SOURCE. ID#S,,,,,,	_,				
	Y	Ν	ACTION		
1. Non-major facility. For VOC or NOx, is PEP ≥ MFT?* (Use WKS-12 for calculating PEP) VOC (PEP) tpy ≥ 25 tpy?			YES - See NOTE #1, go to 2		
NOx (PEP) tpy ≥ 25 tpy?			NO - See NOTE #2		
2. Has the applicant complied with all of the following permit requirements (Re: section 231-5.2):			YES - See NOTE #3		
 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: subdivision 231-5.2(d)) e. Identification of emission sources providing emission offsets and submittal 					
of copies of modified permits for the emission sources (Re: subdivision 231-5.2(d)).					
 NOTE #1 - Modification subject to Subpart 231-5 for each NA contaminant for which the modification's 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.	odifio	otion	ovoodo oppliachia MET		
NOTE #2 - Not subject to Subpart 231-5 review, however, if facility PTE after m a permit with the new PTE limit is required (Re: subdivision 231-5.1)		auon	exceeds applicable MFT,		
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).

WKS-9 (SEE FC-9)

SUBPART 231-5, EXISTING NON-MAJOR FACILITY MODIFICATION – PM-10 NA AREA – APPLICABILITY WORKSHEET						
FACILITY NAME APPLICATION DEC ID# EMISSION SOURCE. ID#S,,,,,,,,,						
	Y	Ν	ACTION			
1. Non-major facility. For PM-10, is PEP \ge MFT? (Use WKS-12 for calculating PEP) PM-10 (PEP) tpy \ge 100 tpy?			YES - See NOTE #1, go to 2			
$\frac{1}{100} (F \perp F) \underline{\qquad} (\mu y \geq 100 \ \mu y)$			NO - See NOTE #2			
2. Has the applicant complied with all of the following permit requirements (Re:			YES - See NOTE #3			
 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: subdivision 231-5.2(d)) e. Identification of emission sources providing emission offsets and submittal of copies of modified permits for the emission sources (Re: subdivision 231-5.2(d)). 			NO - See NOTE #4			
 NOTE #1 - Modification subject to Subpart 231-5. LAER control technology required for each emission source which is part of the modification and which emits PM-10. Emission offset[†] required for the entire amount of the PEP. For PM-10: 1:1 offset ratio and a net air quality benefit analysis (modeling) required (Re: subdivision 231-5.5(d)) 						
NOTE #2 - Not subject to Subpart 231-5 review, however, if Facility PTE after m MFT, a permit with the new PTE limit is required (Re: subdivision 23			exceeds applicable			
NOTE #3 - Detailed NA review may proceed.						
NOTE #4 - Notice of incomplete application should be sent.						

[†] 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).

WKS-10 (SEE FC-10)

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	Ν	ACTION				
 Non-major facility. For VOC or NOx, is PEP ≥ MFT? * (Use WKS-12 for calculating PEP) VOC (PEP) tpy ≥ 50 tpy? 			YES - See NOTE #1, go to 2				
NOx (PEP) tpy \geq 100 tpy?			NO - See NOTE #2				
2. Has the applicant complied with all of the following permit requirements:(Re: section 231-5.2).			YES - See NOTE #3				
 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: subdivision 							
 231-5.2(d)) e. Identification of emission sources providing emission offsets and submittal of copies of modified permits for the emission sources (Re: subdivision 231-5.2(d)). 							
NOTE #1 - Modification subject to Subpart 231-5 for each NA contaminant for which the modification's 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 m a permit with the new PTE limit is required (Re: subdivision 231-5.1)		ation	exceeds applicable MFT,				
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).

-1

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): (check) VOC NOx PM-10							
Facility Emission Potential Calculation							
EMISSION SOURCE ID#	PTE of VOC (tpy)	PTE of NOx (tpy)	PTE of PM-10 (tpy)				
Facility Potential To Emit $(t_{PV}) = (Sum of the$							
(tpy) = (Sum of the potential to emit of each							
emission source)							

ORKSHE	ET	
,		
Y	Ν	ACTION
n		YES - Go to 2 NO - Go to 3
n 		Go to 4
		Go to 5
		YES - Go to 5
		NO - Go to 7
		Go to 6
		Go to 7
sions (Ro	ow 6 - Irce	Row 5) for VOC from
	n h NA ssions (Ro ssion sou	n

NYSDEC	-DAR					WKS-12				Page 2 of 3
Pro	ject Em	ission P	Potential of	of NOx =	Sum of:					
а.	Row 2	or NOx f	from each	new emis	ssion sour	се				
		+	_+	_ +	+	+	+	=	tpy;	
and										
b.							and baselir	ne emissio	ns (Row 6 - Rov	v 5) for NOx from
					nission sou		a a frama th	at aminaia		
							ise from th			
		т	_ +	_ +			+	=	tpy	
	PEP	of NOx =	= a + b = _	t	ρv					
Pro	ject Em	ission P	Potential o	of PM-10	= Sum of:					
а.					nission so					
		+	_ +	_ +	+	+	+	=	tpy;	
and										
b.							and baselir	ne emissio	ns (Row 6 - Rov	v 5) for PM-10 from
					ission sou		aaca from	that omice	sion source	
		' <u> </u>	'	_ '	'	'	+		(Py	
	PEP	of PM-1	0 = a + b =	= t	ру					
		on the equipm combu by the are inc Second emission engine	capacity of nent and/o isted, store departmen luded in de dary emission source' es, the pote	of the emi r restriction ed, or pro- nt and the eterminin sions (as s potentia ential to e	ssion sour ons on the cessed, sh e administr g the pote defined in al to emit. I mit will be	ce to emi hours of hall be tre ator. Fug ntial to er Part 231- For emery based or	t a regulate operation, ated as a p itive emiss nit where re 4 of this Ti gency pow	ed air pollu or on the part of the ions, to the equired by itle) are no er generat im of 500	utant, including a type or amount of design if the limit e extent that the or a applicable ro to be included ting stationary in hours of operation	itation is enforceable y are quantifiable, equirement. when calculating an ternal combustion
NOTE #	#2 -	contan	ninant from	n an emis	sion sourc	e determ	ined as foll	ows:	ions of a regulat w), in tpy, at whi	
		sour	ce physica ce's actual	Illy emitte operatin	d the cont	aminant o	luring its ba rates, and	aseline pe	riod, determined naterials process	by using the
		t	o one of th	ne source	categorie	s listed in		2.1(b)(21)(nt quantifiable if (iii) of this Title, a	the facility belongs and emissions
Continue										iant emissions that ission limitation.

NYSDEC-DAR	WKS-12	Page 3 of 3
	(c) Except for electric utility steam generating units, the average rate must be a downward to exclude any emissions that exceeded an emission limitation with emission source must currently comply, had such emission source been require such limitations during the baseline period. However, if an emission limitation is maximum achievable control technology standard that the administrator propose promulgated under 40 CFR Part 63, the baseline actual emissions rate need or the State has taken credit for such emissions reductions in an attainment demomination and the state plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(0) purposes of a creditable emission increase or emission reduction credit used for currently means at the time that the increase or reduction actually occurred.	which the ed to comply with s part of a sed or nly be adjusted if onstration or G). For the
	(<i>d</i>) For a regulated NSR contaminant, when a project involves multiple emission baseline period must be used to determine the baseline actual emissions of the sources being modified. A different baseline period cannot be used for each regulated contaminant.	e emission
	<i>(e)</i> For multiple emission sources shutting down or taking limits not in conjuncti modification, a different baseline period may be used for each emission source	
	(ii) The applicant must use a reliable basis for quantifying the baseline actual emissions monitoring (CEM) data or stack test data approved by the department m facility is required to generate such data. Facilities required to submit annual emiss accordance with Subpart 202-2 of this Title must use the same method for determin actual emissions as was used for the approved emission statements for the time per encompassing the baseline period, unless CEM or stack test data is available. If su available, acceptable bases for quantifying baseline actual emissions include, but a EPA's AP-42 emission factors, and fuel and solvent purchase records, with department	ust be used if the ion statements in ning baseline eriod uch data is not are not limited to,
NOTE #3 -	Projected actual emissions 231-4.1(b)(42). The maximum annual rate, in tpy, at which emission source is projected to emit a regulated NSR contaminant in any one of the f month period) following the date the source commences operation after a modificatio the 10 years following that date if the project involves increasing the emission source or its potential to emit that regulated NSR contaminant and full utilization of the emiss result in exceeding the applicable significant project threshold in Tables 3, 4 or 6 of S this Part or a significant net emissions increase at the major facility. Projected actual calculated only for existing major facilities.	five years (12- n, or in any one of 's design capacity sion source would subpart 231-13 of
	(i) In determining the projected actual emissions as defined in this Section (before to construction), the owner or operator of the major facility:	peginning actual
	(a) must consider all relevant information, including but not limited to, historical the facility's own representations, the facility's expected business activity and th highest projections of business activity, the facility's filings with the State or fed authorities, and compliance plans under the approved State Implementation Pla	ne facility's eral regulatory
	(<i>b</i>) must include fugitive emissions to the extent quantifiable if the facility belong source categories listed in Part 201-2.1(b)(21)(iii) of this Title, and emissions as startups and shutdowns; and	
	(c) may exclude, in calculating any increase in emissions that results from the p that portion of the emission source's emissions following the project that the ex source could have accommodated during the consecutive 24 month period use baseline actual emissions and that are also unrelated to the particular project.	isting emission
	(ii) In lieu of using the method set out in subparagraph (i) of this paragraph, the owr the facility may elect to use the potential to emit of the emission source(s), in tpy.	ner or operator of

YSDEC-DAR	WKS-13A (SEE F	C-11, FC-12, FC-13, a	nd FC-14)	
SUBPART 231-6, NET EMI	SSION INCREASE AN	ALYSIS WORKSHEET	(Re: paragraph	ר 231-4.1(b)(31))
FACILITY NAME: APPLICATION DEC ID# EMISSION SOURCE ID#s	,,,	,,	_,,	
NOTE: A net emission incre exceeds the SPT.	ease analysis is require	d for each nonattainme	nt contaminant f	or which the PEP equals or
Nonattainment contamina	nt(s) for which PEP ≥ S	SPT (check one): V	OC NOx	PM-10
Contemporaneous Period	: (Re: FC-12, FC-13, an	d/or FC-14 and paragra	aph 231-4.1(b)(1	4))
VOC or NOx; and P commence construct	Dzone Nonattainment A M-10 Nonattainment Ar ation date of the new or n date. These dates mu	ea - The period beginn modified emission sour	ing five years pr ce, and ending	with the scheduled
period which ends v		at the proposed modified		onsecutive calendar year led to commence operation,
201 of this Title, the		ears prior to the date of	complete applic	ting scenario pursuant to Part cation (as defined in section ince date.
Contemporaneous p	periods, as applicable:			
Scheduled commen Scheduled commen				
Start date of contem End date of contem				
(ii) every creditable was not obtained; a (iii) any ERC at the	he sum of: ion potential of the mod emission increase at the nd facility, or portion thereo used as part of an emiss	ification; and e facility which is conten of, selected by the appli	mporaneous and cant which is co	ninant in tpy at an existing d for which an emission offset ntemporaneous and which ipon in the issuance of a
Net Emission Increase Su	mmary			
	VOC	NOx		PM-10
Project Emission Potential (tpy, use WKS-12)				
Contemporaneous creditable emission increase/ERC (<u>+</u> tpy, use WKS-13B)				
NET EMISSION INCREASE (<u>+</u> tpy)				

NYSDEC-DAR	WKS-13B		Page 1 of 2
SUBPART 237 WORKSHEET	1-6, CONTEMPORANEOUS CREDITABLE EMISSION I	NCREASES/EMIS	SION REDUCTION CREDITS
FACILITY NAM	//E: I DEC ID#		
Nonattainment	Contaminants (check one): VOC NOx	PM-10	
Contemporane	eous Period, See NOTE #1:		
EMISSION SO	DURCE ID#s,,,,,,,	,,,	
1. Emission Source	2. Description of contemporaneous change at source	3. Date of occurrence	4. Contemporaneous creditable emission increase/ERC (<u>+</u> tpy), See NOTEs #2, #3
Sum of all incr	eases/decreases above		
NOTE #1 -	Contemporaneous 231-4.1(b)(14). The time period used regulated NSR contaminant as follows:	l in a net emission i	ncrease determination for a
	 (i) except as stated in subparagraphs (ii) and (iii) of thi prior to the scheduled commence construction date of ending with the scheduled commence operation date. in a permit application; 	the new or modifie	d emission source, and
	(ii) in the severe ozone nonattainment area, for emissi calendar year period which ends with the calendar yea commence operation, as stated by the applicant in a p	ar that the proposed	d modification is scheduled to
	(iii) for facilities proposing to use an alternative operati period beginning five years prior to the date of comple Title) for the permit modification and ending with the fill	te application (as d	efined in Part 621.2 of this

NYSDEC-DAR	WKS-13B	Page 2 of 2			
NOTE #2 - Creditable emission increase 231-4.1(b)(15). Any increase in emissions of a regulated NSR conta in tpy from an existing major facility, other than such an increase from any proposed modification 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 ex source(s), or the addition of a new emission source(s); and	tisting emission			
	(ii) for an existing emission source(s) is quantified as the difference between baseline and projected actual emissions, and for a new emission source(s) is quantified base to emit of the emission source(s).				
NOTE #3 -	<i>Emission reduction credit, ERC 231-4.1(b)(19).</i> The actual decrease in emissions of a contaminant, in tpy, determined in accordance with the requirements of Subpart 231-1 ERC must be certified in order to be used in a netting analysis.				

Subparts 231-7 & 8 Attainment Area (PSD) NSR Applicability WKS-14 (SEE FC-15)

SUBPARTS 231-7 & 8, FACILITY TYPE/APPLICABILITY DETERMINATION WORKSHEET					
FACILITY NAM	1E:				
ADDRESS:					
APPLICATION	DEC ID#				
	ROJECT DESCRIPTION:				
EMISSION SO	URCE ID#s,,,,,,,,,	,			
PREPARER'S	NAME T	ITLE			
	D	DATE	_/	/	
REVIEWER'S I	NAME REGION # DAT	E <u>/</u>	/		
		Y	Ν	ACTION	
1. PSD contan	ninant review. For NA applicability go to WKS-1			Go to 2	
	ility with emissions of any regulated NSR contaminant, see NOTE			YES- Go to WKS-15	
#1, being propo	used?			NO - Go to 3	
3. Is a modifica	ation, see NOTE #2, being proposed to an existing facility?			YES - Go to WKS-16	
				NO - See NOTE #3	
COMMENTS:					
NOTE #1-	Regulated NSR Contaminant 231-4.1(b)(45). A regulated NSR con	tamina	int is a	any one of the following:	
	(i) any contaminant for which a national ambient air quality stand	dard ha	as bee	en promulgated and any	
	constituents or precursors for such contaminants identified under the US EPA in a promulgated rule;	er the A	\ct or	by the administrator of	
	(ii) any contaminant that is subject to any standard promulgated	under	section	on 111 of the Act;	
	(iii) any Federal Class I or II substance subject to a standard pro	omulga	ited ui	nder or established by	
	Title VI of the Act;	-		-	
	(iv) any contaminant that otherwise is subject to regulation unde	er the A	Act as	defined in 231-	
	4.1(b)(50); or				
	(v) notwithstanding subparagraphs (i) through (iv), the term regu	ilated		contaminant shall not	
	include any or all hazardous air pollutants either listed in section				
	pursuant to section 112(b)(2) of the Act, which have not been de	elisted	pursu	ant to section 112(b)(3)	
	of the Act, are not regulated NSR contaminants unless the listed				
	regulated as a constituent or precursor of a criteria contaminant	listed	under	r section 108 of the Act.	
NOTE #2 -	<i>Modification 231-4.1(b)(30).</i> A modification is any physical change				
	operation of, a facility which results in a level of annual emissions (
	reductions) in excess of the Baseline Actual Emissions of any Regulated NSR such facility or which results in the emission of any Regulated NSR				
	A modification shall not include the following:	Oome	annia		
	(i) routine maintenance, repair, or replacement as defined in 6 N	JYCRF	? Part	200.	

WKS-14	Page 2 of 2
Energy Supply and Environmental Coordination Act of 1974 (or any superseding leg	islation) or by
(iv) use of an alternative fuel at a steam generating unit to the extent that the fuel is g municipal solid waste;	generated from
(v) use of an alternative fuel or raw material by a facility which:	
would be prohibited under any federally enforceable permit condition which was	established
(<i>b</i>) the facility is approved to use, pursuant to this Part, or which is included in a pursuant to 40 CFR 52.21.	permit issued
prohibited under any permit condition which was established after January 6, 1975,	oursuant to 40
(vii) any change in ownership at a facility.	
of subdivision 231-3.5(c) if the applicant determines that the proposed project does r	not constitute a
	 (ii) use of an alternative fuel or raw material by reason of an order under sections 2(a Energy Supply and Environmental Coordination Act of 1974 (or any superseding leg reason of a natural gas curtailment plan pursuant to the Federal Power Act; (iii) use of 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 a 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 su would be prohibited under any federally enforceable permit condition which was after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved p 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 pursuant to 40 CFR 52.21. (vi) an increase in the hours of operation or in the production rate, unless such chang prohibited under any permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permit condition which was established after January 6, 1975, permitive condition approved pu

SUBPART 231-7, PROPOSED NEW FACILITY – APPLICABILITY WORKSHEET	•		
APPLICATION DEC ID#			
	Y	Ν	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 \geq 100 tpy for any regulated NSR contaminant (See Appendix D) other than GHGs? (Use WKS-19 for calculating PTE) NOx tpy PM-2.5 tpy	$\left \right $		YES - See NOTE #1, go to 4
NOX tpy tpy SO2 tpy tpy CO tpy tpy PM tpy PM-10 tpy			NO - See NOTE #2
3. Is the proposed facility PTE \ge 250 tpy for any regulated NSR contaminant (See Appendix D) other than GHGs? (Use WKS-19 for calculating PTE) NOx tpy PM-2.5 tpy	\top		YES - See NOTE #1, go to 4
NOA			NO - See NOTE #2
4. Has the applicant complied with all of the following permit requirements (Re:			YES - See NOTE #3
 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)). 			NO - See NOTE #4
NOTE #1 - Major facility subject to Subpart 231-7 for each regulated NSR con facility PTE ≥ SPT (see Appendix D).	tamina	nt inc	luding GHGs for which
Ambient air monitoring is required in accordance with Subpart 231	-12		
Air quality impact analysis is required in accordance with Subpart 2	231-12		
BACT required in accordance with section 231-7.6 for each emissi facility and which emits any such Regulated NSR Contaminant.	on sou	rce th	at is part of the proposed
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.			

WKS-16 (SEE FC-17)

SUBPARTS 231-7 & 8, EXISTING FACILITY MODIFICATION – APPLICABILITY WORKSHEET							
FACILITY NAME							
	Y	Ν	ACTION				
1. Is a modification being proposed (see NOTE #1 on WKS-1)?			YES - Go to 2				
			NO - See NOTE #1				
2. For any regulated NSR contaminant other than GHGs (see Appendix D) is existing facility PTE \geq MFT? (See NOTE #2, use WKS-17 for calculating PTE)			YES - Go to 3				
NOx tpy PM-10 tpy			NO - Go to 4				
SO ₂ tpy PM-2.5 tpy							
CO tpy tpy tpy							
3. Major facility Go to WKS-17							
4. Non-major facility Go to WKS-18							
NOTE #1 - Not subject to Subpart 231-7 or 8 but may be subject to subdivision 231-3.5(c).							
NOTE #2 - MFT is 100 tpy for facilities included in the source category list in Ap	pendi	хСо	r 250 tpy if not included				

WKS-17 (SEE FC-17)

SUBPARTS 231-7 & 8, EXISTING MAJOR FACILITY MODIFICATION – APPLICABILITY WORKSHEET						
FACILITY NAM APPLICATION EMISSION SOU		7				
		Υ	Ν	ACTION		
Appendix D) is NOx (PEP)_ SO ₂ (PEP)_ CO (PEP)_	r. For any regulated NSR contaminant other than GHGs (see $PEP \ge SPT?*$ (Use WKS-20 for calculating PEP)tpy ≥ 40 tpy?PM-10 (PEP)tpy ≥ 40 tpy?PM-2.5 (PEP)tpy ≥ 100 tpy?tpy ≥ 100 tpy?tpy ≥ 25 tpy?(PEP)tpy			YES - Go to 2 NO - See NOTE #1		
2. Has a NEI a 4.1(b)(31))	nalysis been provided by the applicant? (Re: paragraph 231-			YES - Go to 3		
4.1(0)(31))				NO - See NOTE #2		
	Ilated NSR contaminant other than GHGs (see Appendix D) which			YES - Go to 4		
NOx (NEI) SO ₂ (NEI) CO (NEI)	on #2, is NEI \geq SNEIT?* (Use WKS-21A & B for calculating NEI) tpy \geq 40 tpy? PM-10 (NEI) tpy \geq 15 tpy? tpy \geq 40 tpy? PM-2.5 (NEI) tpy \geq 10 tpy? tpy \geq 100 tpy? (NEI) tpy tpy \geq 25 tpy? (NEI) tpy			NO - See NOTE #3		
GHGm (PEP)	alculate PEP. (Use WKS-20 for calculating PEP) tpy ≥ 0 tpy? tpy ≥ 75,000 tpy?			See NOTE #4, go to 5		
	licant complied with all of the following permit requirements (Re:			YES - See NOTE #5		
b. BACT i c. Source d. Source): Ility impact analyses (Re: subdivision 231-8.4(a)). review (Re: subdivision 231-8.4(b)). e impact analysis (Re: subdivision 231-8.4(c)). e information (Re: subdivision 231-8.4(d)) nal impact analyses (Re: subdivision 231-8.4(e))			NO - See NOTE #2		
NOTE #1-	Not subject to Subpart 231-8 review, however, must comply with ap reasonable possibility requirements for insignificant modifications.	plicab	le seo	ction 231-11.2		
NOTE #2 -	Notice of incomplete application should be sent.					
NOTE #3-	Must comply with applicable sections 231-8.2 and 231-11.1 Netting	requi	remer	nts.		
NOTE #4 -	NOTE #4 - Modification subject to Subpart 231-8 for each regulated NSR contaminant other than GHGs with NEI ≥ SNEIT or with PEP ≥ SPT for GHGs (See Appendix D)					
	Ambient air monitoring is required in accordance with Subpart 231-1	12				
	Air quality impact analysis in accordance with Subpart 231-12					
	BACT required in accordance with section 231-8.7 for each emissio modification and which emits any such regulated NSR contaminant	n sou	rce th	at is part of the		
NOTE #5 -	Detailed PSD review may proceed.					

*Each regulated NSR contaminant is evaluated independently and can result in the need to follow the "yes" path for one and the "no" path for another

WKS-18 (SEE FC-17)

SUBPARTS 231-7 & 8, EXISTING NON-MAJOR FACILITY MODIFICATION – APPLICABILITY WORKSHEET						
FACILITY NAME APPLICATION DEC ID# EMISSION SOURCE. ID#S,,,	_,					
	Y	Ν	ACTION			
1. Non-major facility. For any regulated NSR contaminant other than GHGs (see Appendix D) is PEP \geq MFT? (See NOTE #1, use WKS-20 for calculating PEP) NOx tpy PM-10 tpy SO2 tpy PM-2.5 tpy CO tpy Tpy tpy PM tpy tpy			Yes - Go to 2 NO - See NOTE #2			
2. For any regulated NSR contaminant including GHGs (see Appendix D) is $PEP \ge SPT$?* (Use WKS-20 for calculating PEP) NOx (PEP)tpy \ge 40 tpy? PM-10 (PEP)tpy \ge 15 tpy? SO ₂ (PEP)tpy \ge 40 tpy? PM-2.5 (PEP)tpy \ge 10 tpy? CO (PEP)tpy \ge 100 tpy?(PEP)tpy PM (PEP)tpy \ge 25 tpy?(PEP)tpy GHGm (PEP)tpy \ge 0 tpy? GHGe (PEP)tpy \ge 75,000 tpy?						
3. Has the applicant complied with all of the following permit requirements (Re: section 231-7.3): YES - See NOTE # a. Air quality impact analyses (Re: subdivision 231-7.3(a)). NO - See NOTE # b. BACT review (Re: subdivision 231-7.3(b)). NO - See NOTE # c. Source impact analysis (Re: subdivision 231-7.3(c)). NO - See NOTE # d. Source information (Re. subdivision 231-7.3(d)). Additional impact analyses (Re. subdivision 231-7.3(e)).						
NOTE #1 - MFT is 100 tpy for facilities included in the source category list in Ap	pendi	ix C o	or 250 tpy if not included			
NOTE #2 - Not subject to Subpart 231-7 review, however, if Facility PTE after n MFT, a permit with the new PTE limit is required (Re: subdivision 23	1-7.1	(b)).				
 NOTE #3 - Modification subject to Subpart 231-7 for each regulated NSR contaminant including GHGs 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 section 231-7.6 for each emission source that is part of the modification and which emits any such regulated NSR contaminant 						
NOTE #4 - Detailed PSD review may proceed.						
NOTE #5 - Notice of incomplete application should be sent.						

*Each regulated NSR contaminant is evaluated independently and can result in the need to follow the "yes" path for one and the "no" path for another

NYSDEC-DA	R
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SUBPARTS 231-7 & 8, FACILITY POTENTIAL TO EMIT CALCULATION WORKSHEET										
FACILITY NA	ME:									
NOTE: Facili	ity PTE IS -									
A. Fe	A. For a proposed new facility - Sum of the PTE of each proposed emission source.									
B. Fe	or an existing f	acility - Sum o	of the PTE of eac	h existing en	nission sourc	ce.				
NOTE: <i>PTE</i> - 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))										
Regulated N	SR Contamina	ant(s): (cneck	/add)							
NOx		CO PM		PM-2.5						
-	sion Potentia	1				I				
EMISSION SO	OURCE ID#	PTE of NOx (tpy)	PTE of SC (tpy)	D ₂ PTE (tpy)	of CO	PTE of PM (tpy)	PTE of PM-10 (tpy)			
Facility Poten (tpy) = (Sum of potential to er emission sour	of the nit of each									

NYSDEC-DAR		WKS-19			Page 2 of 2
EMISSION SOURCE ID#	PTE of PM-2.5 (tpy)	PTE of (tpy)	PTE of (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 WOR	KSHE	ET	
FACILITY NAME:			
EMISSION SOURCE ID#s,,,,,,,,,		<u> </u>	
	Y	Ν	ACTION
1. Does the proposed modification involve addition of one or more new emission			YES - Go to 2
sources?			NO - Go to 3
2. For each new emission source, what is the PTE, see NOTE #1, in tpy of each regulated NSR contaminant (See Appendix E for calculating GHG emissions)? ES ID#			Go to 4
GHGe =	_		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, see NOTE #2, in tpy of each regulated NSR contaminant (See Appendix E for calculating GHG emissions)? ES ID#			Go to 6

IYSDEC-DAR	WKS-20	Page 2 of
see NOTE #3, or the PTE, see regulated NSR contaminant af GHG emissions)? ES ID#	source undergoing modification, what is the PAE, NOTE #1, (if used in lieu of PAE) in tpy of each ter modification (See Appendix E for calculating	Go to 7
SO ₂ = CO = PM =		
PM-2.5 = GHG _m =		
=	umbers are PTE or PAE: PTE PAE	-
7. Project Emission Potentia a. Row 2 for NOx from e		
	++++=	tpy;
and		
each modification of a Where Row 6 ≤ Row 5	5: the difference between future and baseline emiss n existing emission source 5: enter a zero for the NOx increase from that emiss + + + =	sion source
PEP of NOx = $a + b$		
Project Emission Potenti a. Row 2 for SO ₂ from ea		tov
and b. Where Row 6 > Row 5	5: the difference between future and baseline emiss n existing emission source	
Where Row 6 ≤ Row 5	5: enter a zero for the SO ₂ increase from that emiss	
PEP of $SO_2 = a + b$	= tpy	
Project Emission Potent a. Row 2 for CO from ea	ial of CO = Sum of: ch new emission source	
-	+++=	tpy;
each modification of a Where Row 6 ≤ Row 5	5: the difference between future and baseline emiss n existing emission source 5: enter a zero for the CO increase from that emission	on source
+ + + PEP of CO = a + b =	+++= = tpy	tpy

VYSDEC	C-DAR	WKS-20)		Page 3 of 5
Pr	oject Emission Potential of PM =	Sum of:			
	Row 2 for PM from each new emi				
	+++	++	+	= tpy;	
and	Whore Dow G. Dow 5: the differen	noo botwoon future	and becali-	o omionioro (Dove C	Dow E) for DM from
b.	Where Row 6 > Row 5: the differe each modification of an existing e		and baselin	e emissions (ROW 6	- ROW 5) IOF PIVI FOM
	Where Row $6 \le \text{Row } 5$: enter a ze		e from that	temission source	
	+++				
	· · · ·				
PE	EP of PM = a + b = tpy				
D.,	eight Emission Detential of DM 4	Cum of			
	oject Emission Potential of PM-1 Row 2 for PM-10 from each new				
a.	++++		+	= tov:	
and	· ·· · ·	··	·	(p),	
b.	Where Row 6 > Row 5: the differe	ence between future a	and baselin	e emissions (Row 6	- Row 5) for PM-10 from
	each modification of an existing e				
	Where Row $6 \le \text{Row } 5$: enter a ze)
	++++	++	+	= tpy	
	PEP of PM-10 = a + b =	tov			
		. (P)			
Pr	oject Emission Potential of PM-2	.5 = Sum of:			
a.	Row 2 for PM-2.5 from each new	emission source			
	+++	++	+	= tpy;	
and					
b.	Where Row 6 > Row 5: the differe each modification of an existing e		and baselin	e emissions (Row 6	- Row 5) for PIM-2.5 from
	Where Row $6 \le \text{Row } 5$: enter a zero		rease from	that emission source	۵
	++++				
	PEP of PM-2.5 = a + b =	_tpy			
D.,	aiast Emission Detential of CUC	Sum of			
	oject Emission Potential of GHG _r Row 2 for GHG _m from each new e				
a.	+++		+	= tov:	
and	· ·· ·· ·	· ·	·		
b.	Where Row 6 > Row 5: the differe	ence between future a	and baselin	e emissions (Row 6	- Row 5) for GHG _m from
	each modification of an existing e				
	Where Row $6 \le \text{Row } 5$: enter a ze				
	++	++	+	= tpy	
	PEP of $GHG_m = a + b = $	tov			
		_ (py			
Pr	oject Emission Potential of GHG	= Sum of:			
a.					
	+++	++	+	= tpy;	
and					
b.	Where Row 6 > Row 5: the difference		and baselin	e emissions (Row 6	- Row 5) for GHGe from
	each modification of an existing e Where Row 6 ≤ Row 5: enter a ze		ase from t	hat emission source	
	++++				
	· · ·	· ··	·	····	
	PEP of $GHG_e = a + b = $	_ tpy			

NYSDEC	C-DAR	WKS-20	Page 4 of 5
Dr	aiaat Emi		
Pro		ission Potential of = Sum of:	
а.		for from each new emission source	
		+ + + + + = tpy;	
and			
b.	Where I	Row 6 > Row 5: the difference between future and baseline emissions (Row 6 - Row 5) for _	from
D.			1011
		nodification of an existing emission source	
		Row 6 ≤ Row 5: enter a zero for the increase from that emission source	
		+ + + + + = tpy	
	FEF	of = a + b = tpy	
Pro	oject Emi	ission Potential of = Sum of:	
а.	Row 2 f	for from each new emission source	
		+ + + + + + = tpy;	
		+ + + + + + , ipy,	
and			
b.	Where I	Row 6 > Row 5: the difference between future and baseline emissions (Row 6 - Row 5) for _	from
		odification of an existing emission source	
	Where I	Row $6 \le \text{Row 5}$: enter a zero for the increase from that emission source	
	Where i		
		+++++=tpy	
PEP of	f	= a + b = tpy	
NOTE	#1 -	Potential to emit 200.1(bl). The maximum capacity of an air contamination source to emit a	any
		regulated air pollutant under its physical and operational design. Any physical or operation	al limitation
		on the capacity of the emission source to emit a regulated air pollutant, including air polluti	
		equipment and/or restrictions on the hours of operation, or on the type or amount of mater	
		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 qu	
		are included in determining the potential to emit where required by an applicable requirem	
		Secondary emissions (as defined in Part 231-4 of this Title) are not to be included when ca	alculating an
		emission source's potential to emit. For emergency power generating stationary internal co	ombustion
		engines, the potential to emit will be based on a maximum of 500 hours of operation per ye	
		engine unless a more restrictive limitation exists in a permit or registration.	
NOTE	#2 -	Baseline actual emissions 231-4.1(b)(4). The annual rate of emissions of a regulated NSR)
I I I I I I I I I I I I I I I I I I I	<i>"L</i>	contaminant from an emission source determined as follows:	
		contaminant from an emission source determined as follows:	
		(i) The average rate (as defined in clauses a, b, c, d, and e below), in tpy, at which an er	nission
		source physically emitted the contaminant during its baseline period, determined by usin	
		source's actual operating hours, production rates, and types of materials processed, stor	rea, or
		combusted during the selected baseline period.	
		(a) The average rate includes fugitive emissions to the extent quantifiable if the facili	ity bolonge
		to one of the source categories listed in Part 201-2.1(b)(21)(iii) of this Title, and emis	ssions
		associated with startups, shutdowns, and malfunctions.	
		(b) The overage rate must be adjusted downward to evaluate any new compliant and	inciona that
		(b) The average rate must be adjusted downward to exclude any non-compliant emi	
		occurred while the emission source was operating above any applicable emission lir	nitation.
		(c) Except for electric utility steam generating units, the average rate must be adjust	ed
		downward to exclude any emissions that exceeded an emission limitation with which	
		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	
		maximum achievable control technology standard that the administrator proposed of	
		promulgated under 40 CFR Part 63, the baseline actual emissions rate need only be	
		the State has taken credit for such emissions reductions in an attainment demonstra	
		maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G). Fo	
		purposes of a creditable emission increase or emission reduction credit used for net	ung,
		currently means at the time that the increase or reduction actually occurred.	
J			

NYSDEC-DAR	WKS-20	Page 5 of 5	
	(<i>d</i>) For a regulated NSR contaminant, when a project involves multiple emissions baseline period must be used to determine the baseline actual emissions of the esources being modified. A different baseline period cannot be used for each regucent contaminant.	emission	
	(e) For multiple emission sources shutting down or taking limits not in conjunctior modification, a different baseline period may be used for each emission source.		
	(ii) The applicant must use a reliable basis for quantifying the baseline actual emission emissions monitoring (CEM) data or stack test data approved by the department must facility is required to generate such data. Facilities required to submit annual emission accordance with Subpart 202-2 of this Title must use the same method for determinin actual emissions as was used for the approved emission statements for the time peri encompassing the baseline period unless CEM or stack test data is available. If such available, acceptable bases for quantifying baseline actual emissions include, but are EPA's AP-42 emission factors, and fuel and solvent purchase records, with department	at be used if the n statements in ng baseline od data is not e not limited to,	
NOTE #3 -	Projected actual emissions 231-4.1(b)(42). The maximum annual rate, in tpy, at which a emission source is projected to emit a regulated NSR contaminant in any one of the five month period) following the date the source commences operation after a modification, the 10 years following that date if the project involves increasing the emission source's or its potential to emit that regulated NSR contaminant and full utilization of the emissio result in exceeding the applicable significant project threshold in Tables 3, 4 or 6 of Sub this Part or a significant net emissions increase at the major facility. Projected actual er calculated only for existing major facilities.	e years (12- or in any one of design capacity n source would opart 231-13 of	
	(i) In determining the projected actual emissions as defined in this Section (before be construction), the owner or operator of the major facility:	ginning actual	
	(a) must consider all relevant information, including but not limited to, historical of the facility's own representations, the facility's expected business activity and the highest projections of business activity, the facility's filings with the State or feder authorities, and compliance plans under the approved State Implementation Plan	facility's al regulatory	
	(<i>b</i>) must include fugitive emissions to the extent quantifiable if the facility belongs source categories listed in Part 201-2.1(b)(21)(iii) of this Title, and emissions assistantups and shutdowns; and		
	(c) may exclude, in calculating any increase in emissions that results from the pa that portion of the emission source's emissions following the project that the exist source could have accommodated during the consecutive 24 month period used baseline actual emissions and that are also unrelated to the particular project.	ting emission	
	(ii) In lieu of using the method set out in subparagraph (i) of this paragraph, the owne the facility may elect to use the potential to emit of the emission source(s), in tpy.	r or operator of	

NYSDEC-DAR		WKS	6-21A (SE	E FC-18	, FC-19, an	d FC-20)				
SUBPART 231-8, NE	T EMISSI	ON INCRI	EASE AN	ALYSIS	WORKSHE	ET (Re: p	baragraph	231-4.1(b	o)(31))	
FACILITY NAME: APPLICATION DEC I EMISSION SOURCE	D# ID#s	,	,	,		,	,			
NOTE: A net emissio the PEP equals or exc	n increase	e analysis SPT, see	is require Appendix	d for eacl D.	n Regulated	d NSR Co	ntaminant	other thai	n GHGs fo	r which
Common Regulated	NSR Con	taminant	(s) for whi	ich PEP ≥	≥ SPT (che	ck):				
NOx S	O ₂	со	PN	Л	PM-10	PM-	2.5			
List Other Contamir	nants for v	vhich PEF	P≥SPT							
Contemporaneous P	eriod:									
The period be emission sour an applicant ir	ce, and er	nding with	the sched							
Alternative Or 201 of this Tit 621.2 of this T	le, the per	iod beginr	ning five ye	ears prior	r to the date	e of compl	ete applica	ation (as c		
Scheduled co Scheduled co Start date of c	mmence o	operation	date: _							
End date of co										
Net Emission Increases major facility resulting (i) the project em (ii) every creditate was not obtained (iii) any ERC at the not previously us this Part.	from the s ission pote le emission l; and he facility,	sum of: ential of th on increas or portion	e modifica e at the fa thereof, s	ation; and acility whi	d ch is conter by the appli	mporaneo cant whicł	us and for n is conter	which an	emission us and wh	offset ich was
Net Emission Increas	1	- <u>-</u>								.
	NOx	SO ₂	СО	PM	PM-10	PM-2.5				
Project Emission Potential (tpy, use WKS-20)										
Contemporaneous creditable emission increase/ERC (<u>+</u> tpy, use WKS-21B)										
NET EMISSION INCREASE (<u>+</u> tpy)										

NYSDEC-DAR			N	/KS-21B		Page 1 of 2
SUBPART 23 ⁷ WORKSHEET	•	ORANEOUS	CREDITAB	LE EMISSION IN	ICREASES/EMIS	SION REDUCTION CREDITS
FACILITY NAM	ME: I DEC ID#					
Regulated NSI	R Contaminants	other than G	HGs (check	one/add one):		
NOx	SO ₂ CO	PM	PM-10	PM-2.5		·
Contemporane	eous Period, See	• NOTE #1:_				
EMISSION SC	URCE ID#s	,	,	, <u> </u>	<u>, </u>	
1. Emission Source	2. Description				3. Date of occurrence	4. Contemporaneous creditable emission increase/ERC (<u>+</u> tpy), See NOTEs #2, #3
Sum of all incr	eases/decreases	s above				
NOTE #1 -	Contemporane regulated NSR			ime period used	in a net emission	increase determination for a
	prior to the so	cheduled cor	nmence cons	struction date of	the new or modifie	eriod beginning five years ed emission source, and be proposed by an applicant
(continued)	calendar year	r period whic	ch ends with t	the calendar yea		x only, the five consecutive d modification is scheduled to or
Jonanaeu)						

NYSDEC-DAR	WKS-21B	Page 2 of 2
	(iii) for facilities proposing to use an alternative operating scenario pursuant to Part 2 the period beginning five years prior to the date of complete application (as defined i this Title) for the permit modification and ending with the final permit issuance date	
NOTE #2 -	Creditable emission increase 231-4.1(b)(15). Any increase in emissions of a regulated l contaminant in tpy from an existing major facility, other than such an increase from any modification of the existing major facility that is under review by the department, which:	proposed
	(i) results from a physical change in, or a change in the method of operation of an ex source(s), or the addition of a new emission source(s); and	kisting emission
	(ii) for an existing emission source(s) is quantified as the difference between baselin emissions and projected actual emissions, and for a new emission source(s) is quan the potential to emit of the emission source(s).	
NOTE #3 -	<i>Emission reduction credit, ERC 231-4.1(b)(19).</i> The actual decrease in emissions of a re contaminant, in tpy, determined in accordance with the requirements of Subpart 231-10 ERC must be certified in order to be used in a netting analysis.	

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

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

- Example A-1: Existing Major Facility Modification in Manhattan with No Contemporaneous Modifications
- Example A-2: Existing Major Facility Modification in Manhattan with Contemporaneous Modifications
- ***** Example A-3: Existing Non-Major Facility Modification in Manhattan
- 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 Non-Major Facility Modification

Example A-1: Existing Major Facility Modification in Manhattan with No Contemporaneous Modifications

Nonattainment Area NSR

Existing Facility PTE: VOC: 5 tons NOx: 40 tons PM-10 30 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, and PM-10) based on facility location (see maps of nonattainment areas in Appendix B).

Modification PEP/NEI:	<u>SPT:</u>	<u>SNEIT:</u>
VOC: 4 tons	2.5 tons	25 tons
NOx: 45 tons	2.5 tons	25 tons
PM-10: 10 tons	15 tons	15 tons

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

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.

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.

PM-10 nonattainment evaluated on WKS-6

PEP for PM-10 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-10.

Example A-2: Existing Major Facility Modification in Manhattan with Contemporaneous Modifications

Nonattainment Area NSR

Nonattainment Area	a NSR			
	Recent credi	table emission increase	es and em	ission reduction credits at the facility:
Existing Facility PTE:		ecrease:	<u>1/1/09 in</u>	
VOC: 20 tons	VOC:	3 tons	VOC:	7 tons
NOx: 50 tons	NOx:	22 tons	NOx:	20 tons
PM-10: 10 tons	PM-10:	3 tons	PM-10:	4 tons
				s an existing major facility for NA onattainment areas in Appendix B).
Project scheduled to commer	nce construction o	n 10/1/13 and commer	nce operati	ion on 3/1/14.
Modification PEP: SPT:	: Modifi	cation NEI (PEP+CEI-E	ERC)	SNEIT:
VOC: 2 tons 2.5 to		PEP < SPT)		25 tons
NOx: 45 tons 2.5 to		I/A - 22 = 23 tons		25 tons
PM-10: 17 tons 15 to	ons 17+4	– 3 = 18		15 tons
VOC and NOV for advers	no nonottoinmont	avaluated on MIKS EA		
VOC and NOx for severe ozo				our calendar years prior to the calendar
				nd finishes at the end of the calendar
year the proposed modification				in mislies at the end of the calendar
Contemporaneous period: 1/				
PEP for VOC is below signific	cant project thresh	olds and are not subje	ct to Subp	art 231-6, however, the modification
must comply with the reasona	able possibility pro	visions in section 231-	11.2.	
			v the signif	ficant net emission increase threshold
and, therefore, subject to sec	tions 231-6.2 and	231-11.1 for netting.		
PM-10 nonattainment evalua	ted on WKS-6			
		e annual periods (1825	consecuti	ive days) prior to the date construction
				ne proposed modification is scheduled to
commence operation.				
Contemporaneous period: 10)/1/08 to 3/1/14			
		he significant project a	nd significa	ant net emission increase thresholds
and is subject to Subpart 231	-6.			

Example A-3: Existing Non-Major Facility Modification in Manhattan

Nonattainment Area NSR

Existing I	Facility PTE:	MFT
VOC:	7 tons	25 tons
NOx:	20 tons	25 tons
PM-10:	5 tons	100 tons

Facility's PTE is below the major facility threshold for all NA contaminants (NOx, VOC, and PM-10) and therefore is an existing non-major facility (not allowed to net out of NSR applicability).

Modification PEP:

 VOC:
 20 tons

 NOx:
 75 tons

 PM-10:
 20 tons

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

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 set at the new potential to emit is required in the permit.

PEP for NOx is greater than the major facility threshold and is subject to Subpart 231-5.

PM-10 nonattainment evaluated on WKS-9

PEP for PM-10 is less than the major facility threshold and are not subject to 231-5.

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

Nonattainment Area NSR

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

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

<u>VOC and NOx for attainment portion of the ozone transport region evaluated on WKS-7</u> 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.

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.

	•	Existing M eous Modi	lajor Facility Modification in fications	Syracuse with
Nona	ttainmen	t Area NSF	R	
Existing	Facility PTE:			
VOC:	25 tons			
NOx:	150 tons			
Recent	emission redu	uction credits at	the facility:	
<u>1/1/10 d</u>	ecrease:			
VOC:	3 tons			
NOx:	20 tons			
	tion PEP: 5 tons 50 tons	<u>SPT</u> 40 tons 40 tons	struction on 10/1/13 and commence opera <u>Modification NEI (PEP+CEI-ERC)</u> N/A (PEP < SPT) 50 + N/A - 20 = 30 tons	<u>SNEIT</u> 40 tons 40 tons
Contempof the processing commer	poraneous pe oposed modi nce operation	eriod starts on t	of the ozone transport region evaluated on the date five annual periods (1825 consecu duled to commence and ends on the date or 3/1/14	tive days) prior to the date construction
		•	pject threshold and is not subject to Subpare ection 231-11.2.	rt 231-6 however must comply with the
	-	-	ificant project but less than the significant and 231-11.1 for netting.	net emission increase thresholds and

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

Nonattainment Area NSR

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

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

Modification PEP:

VOC: 20 tons NOx: 125 tons

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

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 after the modification is greater than the major facility threshold and an emission limit (in tons per year) for VOC set at the new potential to emit is required in the permit.

PEP for NOx is greater than the major facility threshold and, therefore, is subject to Subpart 231-5.

Example A-7: Existing Non-Major Facility Modification

Attainment Area NSR

The facility is one of the source categories listed in Appendix C, so the major facility threshold is 100 tons.

Existing	Facility PTE:	MFT		
CO: SO2:	20 tons	100 tons		
SO ₂ :	30 tons	100 tons		
PM:	10 tons	100 tons		
Greenho	use Gases	N/A	<u>GWP:</u>	
$\begin{array}{llllllllllllllllllllllllllllllllllll$			CO ₂ :	1
CH4:	1 ton		CH4:	25
N ₂ O:	1 ton		N ₂ O:	298
SF ₆ :	0.5 tons		SF ₆ :	22,800
GHGm: $90,000 + 1 + 1 + 0.5 = 90,002.5$ tonsGHGe: $(90,000)(1) + (1)(25) + (1)(298) + (0.5)(22,800) = 101,723$ tons CO				
GHG₀:	GHG _e : $(90,000)(1) + (1)(25) + (1)(298) + (0.5)(22,800) = 101,723$ tons CO ₂ e			s CO2e

Facility's PTE is below the major facility threshold for all regulated NSR contaminants and, therefore, is an existing nonmajor facility for the purposes of PSD.

Modifica	tion PEP:	<u>SPT:</u>
CO:	120 tons	100 tons
SO ₂ :	45 tons	40 tons
PM:	15 tons	25 tons
Greenho	ouse Gases	
CO ₂ :	140,000 tons	N/A
CH4:	2 tons	N/A
N ₂ O:	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)(25) + (0.5)(298) + (0)(22,800) = 140,199 tons CO ₂ e	75,000 tons CO2e
	ntaminants evaluated on WKS-18	

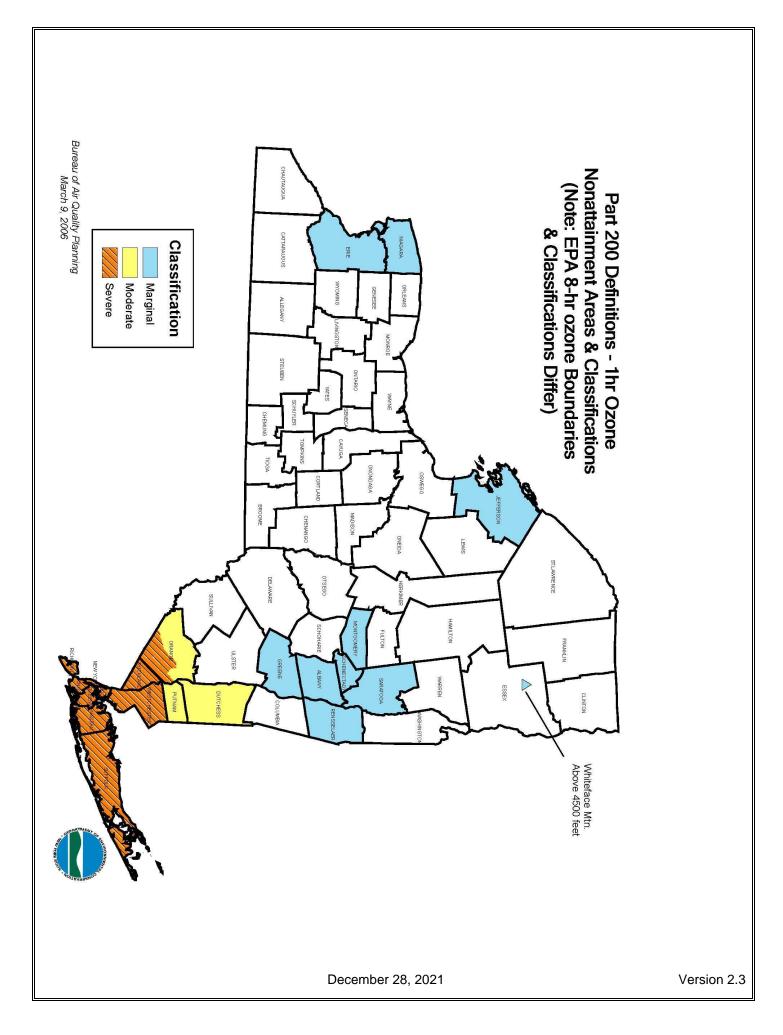
PEP for CO is above the major facility threshold and, therefore, subject to Subpart 231-7. PEP for SO₂ and GHG are above the applicable significant project thresholds and, therefore, subject to Subpart 231-7. PEP for PM is below the applicable significant project threshold and, therefore, not subject to Subpart 231-7.

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

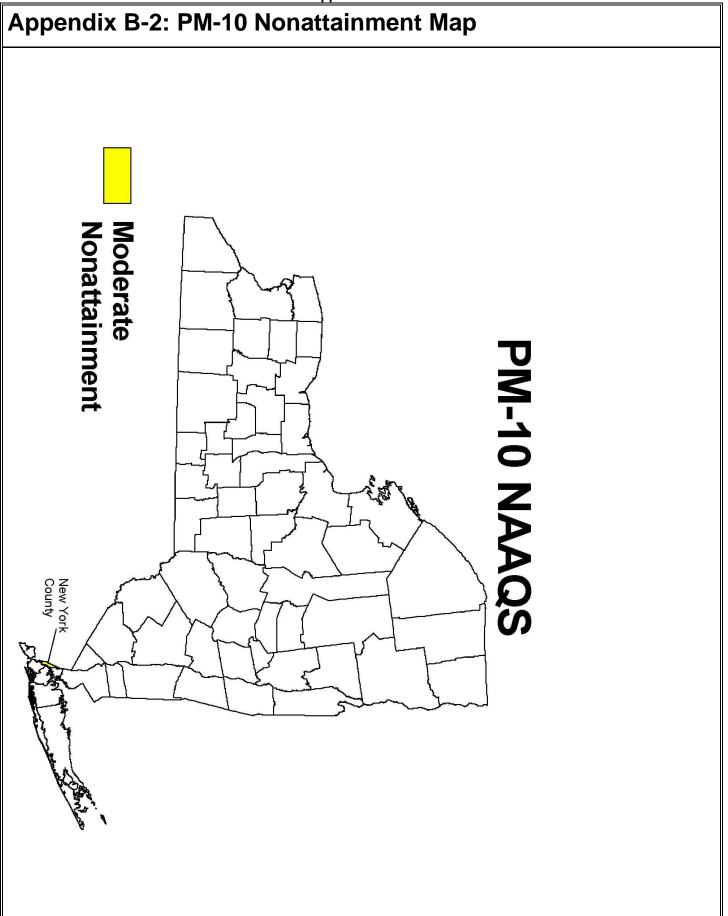
* Appendix B-1: 1-Hour Ozone Nonattainment Map

* Appendix B-2: PM-10 Nonattainment Map

Appendix B-1: 1-Hour Ozone Nonattainment Map



Appendix B-2



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

nt Project Threshold ¹ /Significant ssion Increase Threshold
6 megagrams per year (3.5 x 10
grams per year (15 tpy)
grams (40 tpy)
grams (50 tpy)
ease and 75,000 tpy ^{3,4}
ease

project emission potential threshold

2- both filterable and condensable 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

⁴- values only represent the significant project threshold as netting is not allowed for greenhouse gases.

NYSDEC-DAR	Appendix E	
SUBPARTS 231-7 & 8, GLOBAL WARMING POTENTIAL VALUES FOR CALCULATING CO ₂ EQUIVALENTS		
Greenhouse Gas	Global Warming Potential	
CO ₂	1	
CH ₄	25	
N ₂ O	298	
SF ₆	22,800	
Hydrofluorocarbons	12 to 14,800 ¹	
Perfluorocarbons	6,288 to 17,700 ¹	
To calculate GHG emissio	ns based on mass, the mass emissions of each of the greenhouse gases is totaled together.	
multiplied by their respective	ons based on CO_2 equivalents, the mass emissions of each of the greenhouse gases is ve global warming potential to get emissions on a basis of CO_2 equivalents and then the CO_2 across all of the greenhouse gases emitted (See Example A-7).	

¹ see Table A-1 to Subpart A of 40 CFR Part 98 for specific values for Hydrofluorocarbons and Perfluorocarbons