

Air Dispersion Modeling Impact Analysis Applicability Determination Examples

EXAMPLE 1										
Base Case										
Device Description			Achieve Performance Level for:				Is Modeling Required?			
Device	Meet Env-A 607.01 threshold?	Stack Orientation	NO_x	SO₂	PM₁₀	CO	NO_x	SO₂	PM₁₀	CO
Boiler #1 25 MMBtu/hr	YES	Vertical/ Unobstructed	☒	☒	☒	n/a	NO	NO	NO	NO
Boiler #2 25 MMBtu/hr	YES	Vertical/ Unobstructed	☒	☒	☒	n/a	NO	NO	NO	NO
Boiler #3 2 MMBtu/hr	NO	Vertical/ Unobstructed	☒	☒	☒	n/a	NO	NO	NO	NO
Facility-wide:			<40 tpy	<40 tpy	<15 tpy	<100 tpy				

Air Dispersion Modeling Impact Analysis Applicability Determination Examples

EXAMPLE 1 Base Case										
Device Description			Achieve Performance Level for:				Is Modeling Required?			
Device	Meet Env-A 607.01 threshold?	Stack Orientation	NO _x	SO ₂	PM ₁₀	CO	NO _x	SO ₂	PM ₁₀	CO
Boiler #1 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Boiler #2 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Boiler #3 2 MMBtu/hr	NO	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Facility-wide:			<40 tpy	<40 tpy	<15 tpy	<100 tpy				

EXAMPLE 2 Capped Stacks										
Device Description			Achieve Performance Level for:				Is Modeling Required?			
Device	Meet Env-A 607.01	Stack Orientation	NO _x	SO ₂	PM ₁₀	CO	NO _x	SO ₂	PM ₁₀	CO
Boiler #1 25 MMBtu/hr	YES	Capped	✗	✗	✗	n/a	YES	YES	YES	YES
Boiler #2 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Boiler #3 2 MMBtu/hr	NO	Capped	✗	✗	✗	n/a	NO	NO	NO	NO
			tpy	tpy	tpy	tpy				
Facility-wide:			<40 tpy	<40 tpy	<15 tpy	<100 tpy				

Air Dispersion Modeling Impact Analysis Applicability Determination Examples

EXAMPLE 1										
Base Case										
Device Description			Achieve Performance Level for:				Is Modeling Required?			
Device	Meet Env-A 607.01 threshold?	Stack Orientation	NO _x	SO ₂	PM ₁₀	CO	NO _x	SO ₂	PM ₁₀	CO
Boiler #1 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Boiler #2 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Boiler #3 2 MMBtu/hr	NO	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Facility-wide:			<40 tpy	<40 tpy	<15 tpy	<100 tpy				

EXAMPLE 3										
Facility-Wide Emissions > Env-A 606.02(c)(5) Threshold										
Device Description			Achieve Performance Level for:				Is Modeling Required?			
Device	Meet Env-A 607.01	Stack Orientation	NO _x	SO ₂	PM ₁₀	CO	NO _x	SO ₂	PM ₁₀	CO
Boiler #1 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	YES	YES	YES	YES
Boiler #2 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	YES	YES	YES	YES
Boiler #3 2 MMBtu/hr	NO	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
			tpy	tpy	tpy	tpy				
Facility-wide:			50 tpy	<40 tpy	<15 tpy	<100 tpy				

Air Dispersion Modeling Impact Analysis Applicability Determination Examples

EXAMPLE 1										
Base Case										
Device Description			Achieve Performance Level for:				Is Modeling Required?			
Device	Meet Env-A 607.01 threshold?	Stack Orientation	NO _x	SO ₂	PM ₁₀	CO	NO _x	SO ₂	PM ₁₀	CO
Boiler #1 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Boiler #2 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Boiler #3 2 MMBtu/hr	NO	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
Facility-wide:			<40 tpy	<40 tpy	<15 tpy	<100 tpy				

EXAMPLE 4										
Devices meet an Env-A 606.06(c) performance thresholds										
Device Description			Achieve Performance Level for:				Is Modeling Required?			
Device	Meet Env-A 607.01	Stack Orientation	NO _x	SO ₂	PM ₁₀	CO	NO _x	SO ₂	PM ₁₀	CO
Boiler #1 25 MMBtu/hr	YES	Vertical/ Unobstructed	✓	✗	✗	n/a	NO	YES	YES	YES
Boiler #2 25 MMBtu/hr	YES	Vertical/ Unobstructed	✗	✓	✗	n/a	YES	NO	YES	YES
Boiler #3 2 MMBtu/hr	NO	Vertical/ Unobstructed	✗	✗	✗	n/a	NO	NO	NO	NO
			tpy	tpy	tpy	tpy				
Facility-wide:			50 tpy	<40 tpy	<15 tpy	<100 tpy				