

CONFORMITY ANALYSIS CERTIFICATION

PROJECT NAME: Tarrant County, TX, Oil and Gas Development
 PROJECT LOCATION: (Provide legal description)
(Case File - _____)
Dallas-Fort Worth, TX – Serious Ozone (NOx/VOC) nonattainment
 PROJECT DESCRIPTION: Construction (well pads and roads, drilling, completion, testing
and Operation

POTENTIAL TOTAL (DIRECT AND INDIRECT) EMISSIONS (tons/year):

Carbon monoxide (CO):	[Not applicable-attainment]	4.3 tons/year
Lead (Pb):	[Not applicable-attainment]	n/a
Nitrogen oxides (NO _x):	[Not applicable-de minimis]	6.9 tons/year
Particulate Matter (PM ₁₀):	[Not applicable-attainment]	51.3 tons/year
Particulate Matter (PM _{2.5}):	[Not applicable-attainment]	7.9 tons/year
Sulfur dioxide (SO ₂):	[Not applicable-attainment]	0.2 tons/year
Volatile Organic Compounds re: Ozone (O ₃):	[Not applicable-de minimis]	1.6 tons/year

MAXIMUM MODELED IMPACT (µg/m³):

Carbon monoxide (CO):	[Not applicable-attainment]
Lead (Pb):	[Not applicable-attainment]
Nitrogen dioxide (NO ₂):	[Not applicable-attainment]
Particulate Matter (PM ₁₀):	[Not applicable-attainment]
Particulate Matter (PM _{2.5}):	[Not applicable-attainment]
Ozone (O ₃):	[Not applicable-de minimis]
Sulfur dioxide (SO ₂):	[Not applicable-attainment]

THIS PROJECT HAS BEEN DETERMINED TO CONFORM WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL AIR QUALITY LAWS, REGULATIONS AND STATUTES, AS DEFINED IN THE Dallas – Fort Worth Metropolitan Planning Organization (Ozone; Serious NAA) IMPLEMENTATION PLAN(s), FOR THE FOLLOWING REASON(s):

- Action is covered within the approved Implementation Plan.
- Action is excluded by the Regulatory Authority per:
- Action is categorically excluded per (citation):
- Potential total emissions are below *de minimis* levels: Per 40 CFR 93.153(b)(1) <50 T/Y NOx and <50 T/Y VOC (Serious Ozone NAA)
- Potential total emissions are fully offset by:
- Maximum modeled impacts are below applicable standards:
- Other (specify): Subject to implementation per March 1, 2004 “Tarrant County, TX, Emissions Inventory” and assumptions.

SIGNED: _____

TITLE: _____

DATE: _____

Scenario 1A - Construction

Heavy Equipment Fugitive Dust

	Value	Units	Notes
Number of Wells	31	--	
Period of Operations	3	days	
Disturbed Area - Resource Roads	1.52	acres	
Disturbed Area - Well Pad	2.07	acres	
Control Efficiency - Watering	0.5		

Heavy Equipment - Exhaust

	Value	Units	Notes
Number of Wells*	31	--	
Hours of Operations	10	hours	Over 3 days
Period of Operations	3	days	

Commuting Vehicles - Fugitive Dust

	Value	Units	Notes
Surface Material Silt Content	12	%	
Surface Material Moisture Content	10	%	
Control Efficiency - Watering	50	%	
Number of Wells*	31		
Round Trip Distance	10	miles	

Commuting Vehicles - Exhaust

	Value	Units	Notes
Number of Wells*	31		
Round Trip Distance*	10	miles	

* - Cell referenced to previous value

Value in Red - Master value, referenced by all other cells using this input

Scenario 1B - Rig Up, Down, Drill

Commuting Vehicles - Fugitive Dust

	Value	Units	Notes
Surface Material Silt Content*	12	%	
Surface Material Moisture Content*	10	%	
Control Efficiency - Watering*	50	%	
Number of Wells*	31		
Round Trip Distance	8	miles	

Commuting Vehicles - Exhaust

	Value	Units	Notes
Number of Wells*	31		
Round Trip Distance*	8	miles	

Drill Engine

	Value	Units	Notes
Engine Capacity	500	Hp	
# of Units	2		
Load Factor	70	%	
Operating Hours	180	hrs	

* - Cell referenced to previous value

Value in Red - Master value, referenced by all other cells using this input

Scenario 1B - Rig Up, Down, Drill

Commuting Vehicles - Fugitive Dust

	Value	Units	Notes
Surface Material Silt Content*	12	%	
Surface Material Moisture Content*	10	%	
Control Efficiency - Watering*	50	%	
Number of Wells*	31		
Round Trip Distance	8	miles	

Commuting Vehicles - Exhaust

	Value	Units	Notes
Number of Wells*	31		
Round Trip Distance*	8	miles	

Drill Engine

	Value	Units	Notes
Engine Capacity	500	Hp	
# of Units	2		
Load Factor	70	%	
Operating Hours	180	hrs	

* - Cell referenced to previous value

Value in Red - Master value, referenced by all other cells using this input

Scenario 1C - Completion, Testing (Flaring)

Commuting Vehicles - Fugitive Dust

	Value	Units	Notes
Surface Material Silt Content*	12	%	
Surface Material Moisture Content*	10	%	
Control Efficiency - Watering*	50	%	
Number of Wells*	31		
Round Trip Distance	10	miles	

Commuting Vehicles - Exhaust

	Value	Units	Notes
Number of Wells*	31		
Round Trip Distance*	10	miles	

Drill Engine

	Value	Units	Notes
Engine Capacity	100	Hp	
# of Units	1		
Load Factor	50	%	
Operating Hours	56	hrs	

Flaring

	Value	Units	Notes
Number of Units	1		
Total Amt. of Gas Flared	5000	MMBtu	
Number of Wells	31		

* - Cell referenced to previous value

Value in Red - Master value, referenced by all other cells using this input

Scenario 2 - Operations
Part A - Weekly Well Site Visits

Commuting Vehicles - Fugitive Dust

	Value	Units	Notes
Surface Material Silt Content*	12	%	
Surface Material Moisture Content*	10	%	
Control Efficiency - Graveling	95	%	
Number of Wells*	31		
Round Trip Distance	10	miles	
Pick-up Truck Weight	3000	lbs	

Commuting Vehicles - Exhaust

	Value	Units	Notes
Number of Wells*	31		
Round Trip Distance*	10	miles	

Part B - Gas Lift Compression

	Value	Units	Notes
Engine Horsepower	100	hp	
Number of Units	1		
Operating Hours/Year	6132	hrs	
Load Factor	0.7		

Part C - Well/Gas Fluids Separator

Three-Phase Separator Heater

	Value	Units	Notes
Operating Hours/Year	256	hrs	
Separator Size	1.25	MMBtu/hr	
Fuel Usage	0.31	MMCF/yr	
Number of Units	1		

Gas/Fluids Separator

	Value	Units	Notes
Operating Hours/Year	6132	hrs	
Load Factor	0.7		

* - Cell referenced to previous value

Value in Red - Master value, referenced by all other cells using this input

Tarrant County, Texas, Emission Inventory (March 1, 2004)

Activity	PM10 Tons	PM2.5 Tons	NOx Tons	SO2 Tons	CO Tons	VOC Tons
Scenario 1A - Construction	11.9	1.9	---	---	---	---
Scenario 1B - Rig Up, Drilling, Rig Down	20.6	3.2	2.2	0.2	1.6	0.3
Scenario 1C - Completion & Testing	18.4	2.7	0.5	0.1	1.7	0.4
Scenario 2A-C - Operations	0.33	0.12	4.2	0.003	1.0	0.9
Grand Total: All Sources	51.3	7.9	6.9	0.2	4.3	1.6

Activity	PM ₁₀ Tons	PM _{2.5} Tons	NOx Tons	SO ₂ Tons	CO Tons	VOC Tons
Construction Fugitive Dust	1.7	0.3	---	---	---	---
Traffic Exhaust	0.08	0.10	0.93	0.10	0.24	0.08
Commuting Vehicles - Fugitive Dust	10.1	1.47	---	---	---	---
Commuting Vehicles - Exhaust ^a	0.041	0.038	0.177	0.035	0.32	0.050
Grand Total: 1A - Construction	11.9	1.9	1.1	0.1	0.6	0.1

^a PM_{2.5} assumed = PM₁₀ for this source.

Activity	PM ₁₀ Tons	PM _{2.5} Tons	NOx Tons	SO ₂ Tons	CO Tons	VOC Tons
Commuting Vehicles - Fugitive Dust	20.5	3.0	---	---	---	---
Commuting Vehicles - Exhaust	0.05	0.04	0.25	0.04	1.21	0.11
Drill Engine ^a	0.14	0.14	1.95	0.13	0.42	0.16
Grand Total: 1B - Rig up, drilling, rig down	20.6	3.2	2.2	0.2	1.6	0.3

^a PM_{2.5} assumed = PM₁₀ for this source.

Activity	PM ₁₀ Tons	PM _{2.5} Tons	NOx Tons	SO ₂ Tons	CO Tons	VOC Tons
Commuting Vehicles - Fugitive Dust	18.3	2.68	---	---	---	---
Commuting Vehicles - Exhaust	0.064	0.058	0.29	0.054	0.78	0.094
Diesel Pump Engine ^a	0.003	0.003	0.04	0.003	0.01	0.004
Sweet Gas Flare	--	--	0.17	--	0.9	0.350
Grand Total: 1C - Completion & Testing	18.4	2.7	0.5	0.1	1.7	0.4

^a PM_{2.5} assumed = PM₁₀ for this source.

Activity	PM ₁₀ Tons	PM _{2.5} Tons	NOx Tons	SO ₂ Tons	CO Tons	VOC Tons
Commuting Vehicles - Fugitive Dust	0.25	0.036	---	---	---	---
Commuting Vehicles - Exhaust	1.75E-03	1.34E-03	1.79E-02	2.00E-03	1.95E-01	1.26E-02
Gas Lift Compression ^a	0.082	0.082	4.2	0.001	0.76	0.26
Separator ^a	0.001	0.001	0.02	0.000	0.01	0.61
Grand Total: 2A-C - Operations	0.3	0.1	4.2	0.003	1.0	0.9

^a PM_{2.5} assumed = PM₁₀ for this source.