



CRESTONE PEAK

RESOURCES

Site Specific Air Quality Plan Addendum

For Rush 4-65 29-30 3AH-4DH

(Rush SOUTH Facility)

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1. Purpose

- The purpose of this plan is to provide the necessary information for meeting Air Quality requirements as required by the Oil and Gas Operator Agreement between ConocoPhillips Company (COPC), a Delaware corporation, and its subsidiaries, and Burlington Resources Oil & Gas Company LP, a Delaware limited partnership, and the City of Aurora, Colorado, a municipal corporation.
- This plan addendum is intended to address site specific items. Each location presents unique challenges related to topography, surrounding land uses, proximity to other sources of emissions, and conditions driven by the Operator Agreement.

2. Scope

- The Field-wide Air Quality Management Plan addresses requirements in broad terms. Many aspects of the air quality management strategy are common to all locations. This site-specific plan addendum is intended to address only the aspects that are unique to a certain location and will not repeat general terms outlined in the field-wide plan. Use of Tier 2 and Tier 4 Fracturing pumps will be identified in the site-specific plans per the Operator Agreement.
- Ajax and the company monitor the local subject area based on current environmental conditions. As conditions change, the data analytics will be revised to most accurately represent the current environment. Thresholds and trending lines are established through met data (a larger set of established data used to describe site specific conditions) and established monitoring inputs. Analysis of changes in trending and thresholds will be achieved by using established guidance from Colorado Department of Public Health Environment (“CDPHE”) and the Environmental Protection Agency. Ajax and the company will work with City staff to communicate the relevant information. Established alert levels/thresholds and data feed to the City will be provided ASAP, this is to be determined with the City staff.
- The Company will include the results of canister samples in regular required reports. Concentration data will be reported in line with the associated health guideline exposure window. For example, comparison to the acute health guideline (defined as less than or equal to a 14 day exposure) for benzene will be reported as the average of all benzene measurements taken in a moving 14 day window along with the single point maximum benzene measurement as a percentage of the health guideline, resulting in a graphic similar to the below:



- A comparison similar to the example above will be provided for all other measured compounds if there are related standard health guidelines. Note: Not all compounds have a defined health guideline.
- There are no defined Health Guidelines for the Acute/Chronic and defined levels of methane, ethane, and heavier hydrocarbons, but we’ve included them in the table for reference. As noted in the Fieldwide AQMP the presence of methane, ethane, and heavier hydrocarbons will

be reported as a change over time based on the Nondispersive Infrared (“NDIR”) sensor readings.

3. Objectives

The following objectives are applied to the site-specific addendum.

- Identification of background sources of emissions and potential causes of interference.
- Location specific considerations such as topography, unique site designs and multi-well pads in different stages of production.
- Describe location specific monitor locations including number and type of equipment.

4. Monitoring Strategy

- Secure vendor contract – September 3, 2019
- Identify monitor locations in field with Vendor – October 15, 2019
- Begin pre-construction baseline air monitoring – Upon receipt of COGCC Form 2 and 2A, and at least 7 calendar days prior notification to the City of Aurora
- Establish alert levels/thresholds and data feed to the City – ASAP, TBD with the City staff

* Any timelines listed above may be subject to change based on City requirements and O&G location specific issues which may be outside of ConocoPhillips’ control.

4.1. Pre-activity information

- List of possible sources of outside interference: to be determined during the monitor location identification phase
- List of receptors: to be determined during the monitor location identification phase

4.2. Location Specific Considerations

- Identify area topography
- Identification of site design / structures of concern (fences, sound walls, etc.)
- Describe site activity and stages
- Timeline for activities
- At least 5 days prior to construction, commence ambient baseline monitoring

4.3. Equipment siting

- Site plan diagram for equipment locations, including any MET station criteria
- Anticipated timing for re-locations
- Drilling, Completions, Production location modifications

5. Location Data plan

- Frequency of collection
- Report out matrix

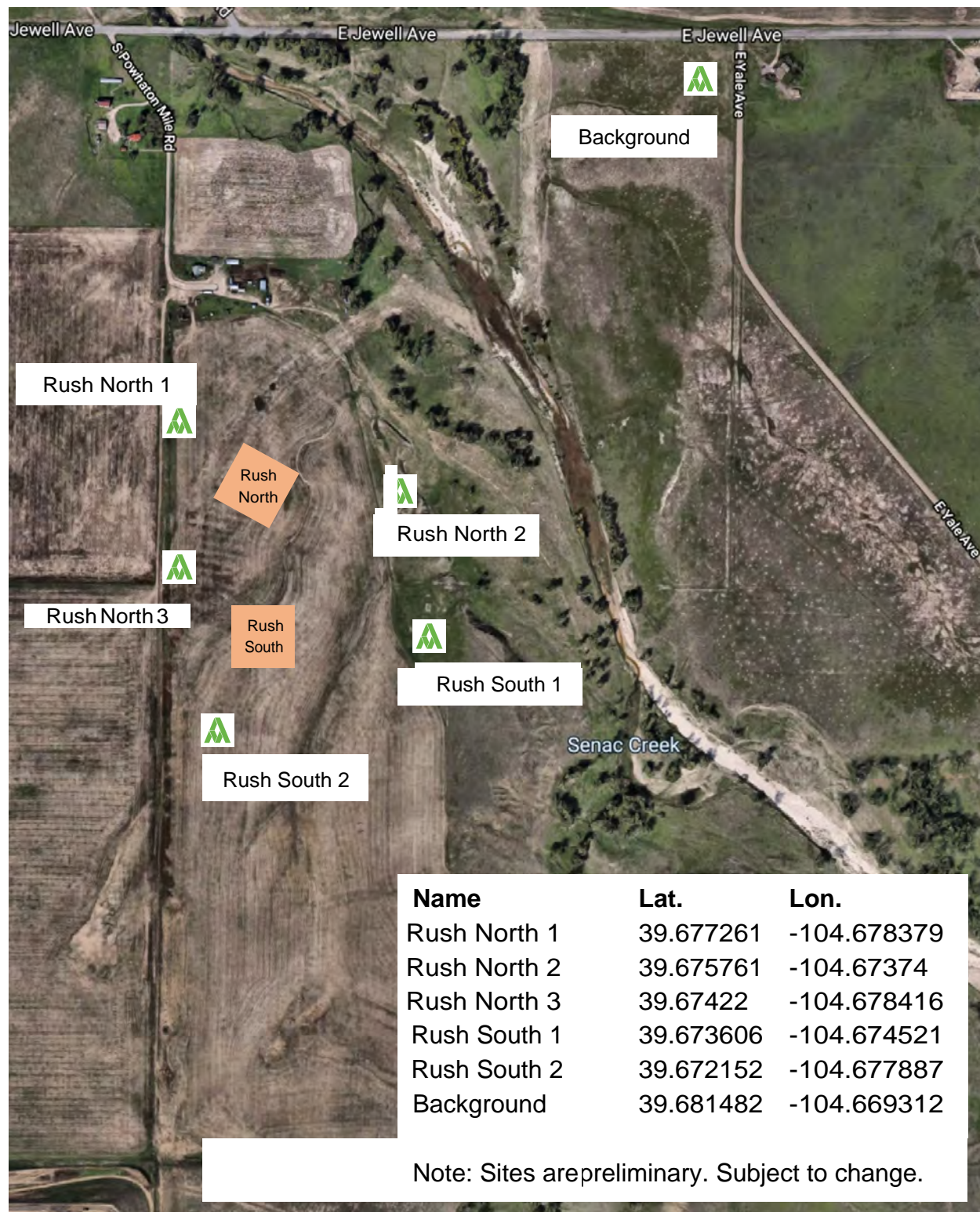
6. References

- Oil and Gas Operator Agreement
- Best Management Practices

7. Attachments

- Map of Proposed Air Monitoring Sites
- CDPHE Health Guidelines

Proposed Monitoring Site Locations: Rush Pad Sites



CDPHE Health Guidelines

Substance/Compound	Health Guideline Value			
	Acute	Source	Chronic	Source
1,2,3-Trimethylbenzene	3,000	TCEQ	12	US EPA
1,2,4-Trimethylbenzene	3,000	TCEQ	12	US EPA
1,3,5-Trimethylbenzene	3,000	TCEQ	12	US EPA
1-Butene	27,000	TCEQ	2,300	TCEQ
1-Hexene	500	TCEQ	50	TCEQ
1-Pentene	12,000	TCEQ	560	TCEQ
2,2,4-Trimethylpentane	4,100	TCEQ	124	PPRTV
2,3,4-Trimethylpentane	4,100	TCEQ	124	PPRTV
2,3-Dimethylbutane	5,500	TCEQ	99	TCEQ
2,3-Dimethylpentane	8,200	TCEQ	2,200	TCEQ
2,4-Dimethylpentane	8,200	TCEQ	2,200	TCEQ
Methane	NA	-	NA	-
2-Methylheptane	4,100	TCEQ	390	TCEQ
2-Methylhexane	8,200	TCEQ	2,200	TCEQ
2-Methylpentane	5,500	TCEQ	99	TCEQ
3-Methylheptane	4,100	TCEQ	390	TCEQ
3-Methylhexane	8,200	TCEQ	2,200	TCEQ
3-Methylpentane	5,500	TCEQ	100	TCEQ
α-Pinene	630	TCEQ	63	TCEQ
Acetylene (ethyne)	25,000	TCEQ	2,500	TCEQ
Benzene	9	A TSDR	4	USEPA
Cis-2-butene	15,000	TCEQ	700	TCEQ
Cis-2-pentene	12,000	TCEQ	560	TCEQ
Cyclohexane	1,000	TCEQ	1,743	USEPA
Cyclopentane	5,900	TCEQ	120	TCEQ
Ethane	NA	-	NA	-
Ethylbenzene	5,000	A TSDR	9	Cal EPA2
Ethylene	500,000	TCEQ	5,300	TCEQ
Isobutane	33,000	TCEQ	10,000	TCEQ
Isopentane	8,100	PPRTV	8,000	TCEQ
Isoprene	20	TCEQ	2	TCEQ
Isopropylbenzene (cumene)	510	TCEQ	81	USEPA
m,p-Xylene	2,000	A TSDR	23	USEPA
m-Diethylbenzene	460	TCEQ	46	TCEQ
Methylcyclohexane	4,000	TCEQ	400	TCEQ
Methylcyclopentane	750	TCEQ	75	TCEQ
m-Ethyltoluene	250	TCEQ	25	TCEQ
n-Butane	92,000	TCEQ	10,000	TCEQ
n-Decane	1,750	TCEQ	175	TCEQ
n-Dodecane	1,700	DOE	3.8	TCEQ

n-Hexane	5,500	TCEQ	199	USEPA
n-Nonane	3,000	TCEQ	3.8	PPRTV
n-Octane	4,100	TCEQ	124	PPRTV
n-Pentane	68,000	TCEQ	8,000	TCEQ
n-Propylbenzene	510	TCEQ	51	TCEQ
n-Undecane	550	TCEQ	55	TCEQ
o-Ethyltoluene	250	TCEQ	25	TCEQ
o-Xylene	2,000	A TSDR	23	USEPA
p-Diethylbenzene	450	TCEQ	45	TCEQ
p-Ethyltoluene	250	TCEQ	25	TCEQ
Propane	NA	-	NA	-
Propylene	NA	-	1,743	CalEP A
Styrene	5,000	A TSDR	235	USEPA
Toluene	2,000	A TSDR	1,327	USEPA
Trans-2-butene	15,000	TCEQ	700	TCEQ
Trans-2-pentene	12,000	TCEQ	560	TCEQ

TCEQ → Texas Commission on Environmental Quality

PPRTV → Provisional Peer-Reviewed Toxicity Values

ASTDR → Agency for Toxic Substances and Disease Registry

CalEPA → California Environmental Protection Agency

RA → Regional Authority (in Colorado it's CDPHE)