

Smith, Claudia

From: Rachel E. Ames <RAmes@barr.com>
Sent: Monday, February 15, 2016 3:02 PM
To: Smith, Claudia
Cc: Lori L. Stegink; Shanna R. Braun; edmundbaker@mhanation.com; Rothery, Deirdre; Archer, Tina; 'Ruttle, Mike'
Subject: RE: Parshall Transload Facility Request for Coverage Under General Permit
Attachments: Diesel Throughput Estimate.xlsx; TANKS Emission Estimate - Tank 1.pdf

Claudia,

We have attached calculations for the estimated maximum annual throughput for Tank 1 of Distillate Fuel Oil No. 1. Using this throughput estimate, we calculated annual emissions for Tank 1 using TANKS 4.09d software, reflected in the table below. We have also attached the TANKS report for your records.

Working Loss	Breathing Loss (estimate includes standing losses)	Total Loss
0.47 lbs VOC/year	0.11 lbs VOC/year	0.58 lbs VOC/year

Please let us know if you would like us to provide any additional documentation to process the Request for Coverage.

Thanks,
Rachel

Rachel E. Ames

Environmental Specialist
Minneapolis, MN office: 952.832.2845
RAmes@barr.com
www.barr.com

resourceful. naturally.



From: Smith, Claudia [mailto:Smith.Claudia@epa.gov]
Sent: Monday, February 08, 2016 4:54 PM
To: Rachel E. Ames
Cc: Lori L. Stegink; Shanna R. Braun; edmundbaker@mhanation.com; Rothery, Deirdre; Archer, Tina; 'Ruttle, Mike'; Hartman, Steve
Subject: RE: Parshall Transload Facility Request for Coverage Under General Permit

Rachel,

We have reviewed the ESA and NHPA portions of the US Silica submittals dated December 21, 2015, and January 20, 2016. The information provided in these two submittals satisfy the requirements for ESA and NHPA for the Request for Coverage under the SQCS General Permit.

I do, however, need one more piece of information from for the project to fully process the Request for Coverage that was inadvertently overlooked in the previous 1/6/16 request for additional information. Please submit emissions estimates/calculations for the working, standing, and breathing losses for the diesel storage tank identified as Tank-1, so that we have a complete accounting of the facility-wide potential emissions. I recommend the use of the equations/algorithms specified in AP-42 Chapter 7 for estimating VOC emissions from storage tanks. The equations specified in AP-42 Chapter 7 (<http://www.epa.gov/ttn/chief/ap42/ch07/index.html>) can be employed with many current spreadsheet/software programs.

Please submit this information no later than **Wednesday, February 17, 2016**.

Thank you,

Claudia

Claudia Young Smith
Environmental Scientist
US EPA Region 8 Air Program
Phone: (303) 312-6520
Fax: (303) 312-6064

<http://www2.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region>

Air Program, Mail Code 8P-AR
US EPA Region 8
1595 Wynkoop Street
Denver, Colorado 80202

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From: Rachel E. Ames [<mailto:RAmes@barr.com>]

Sent: Wednesday, January 20, 2016 2:40 PM

To: Smith, Claudia <Smith.Claudia@epa.gov>

Cc: Lori L. Stegink <LStegink@barr.com>; Shanna R. Braun <SBraun@barr.com>; edmundbaker@mhanation.com;

Rothery, Deirdre <Rothery.Deirdre@epa.gov>; Archer, Tina <Archer@ussilica.com>; 'Ruttle, Mike'

<Ruttle@ussilica.com>; Hartman, Steve <hartman@ussilica.com>

Subject: RE: Parshall Transload Facility Request for Coverage Under General Permit

Claudia,

We have reviewed the EPA's completeness review questions and appreciate your time to talk through these comments last week. The attached correspondence provides additional information and clarification regarding threatened and endangered species determinations of effect, as well as areas surveyed as part of the Class III cultural resources inventory and Tribal Historic Preservation Officer (THPO) coordination.

Please let us know if the EPA has additional questions or requires further information to complete its completeness review for the U.S. Silica Parshall Transload Facility General Permit Request for Coverage.

Thanks,

Rachel

Rachel E. Ames

Environmental Specialist

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resourceful. naturally.



From: Smith, Claudia [<mailto:Smith.Claudia@epa.gov>]
Sent: Wednesday, January 06, 2016 10:06 AM
To: Rachel E. Ames
Cc: Lori L. Stegink; edmundbaker@mhanation.com; Rothery, Deirdre
Subject: RE: Parshall Transload Facility Request for Coverage Under General Permit

Rachel,

The original attachment had a watermark of DRAFT that was unintentional. Please replace the attachment with this one.

Apologies,

Claudia

From: Smith, Claudia
Sent: Wednesday, January 06, 2016 8:45 AM
To: 'rames@barr.com' <rames@barr.com>
Cc: 'lstegink@barr.com' <lstegink@barr.com>; edmundbaker (edmundbaker@mhanation.com) <edmundbaker@mhanation.com>; Rothery, Deirdre <Rothery.Deirdre@epa.gov>
Subject: Parshall Transload Facility Request for Coverage Under General Permit

Rachel,

We conducted an initial review of US Silica's Request for Coverage under the Stone Quarrying, Crushing and Screening General Permit for the construction of a new rail transload facility to transport silica sand from rail cars to trucks near Parshall, North Dakota, on Indian country lands within the Fort Berthold Indian Reservation.

US Silica's Request for Coverage was submitted pursuant to the Tribal New Source Review regulations at 40 CFR 49.156. We received your request on December 21, 2015 and reviewed the submitted information. We have determined that your Request for Coverage is incomplete at this time because some aspects of the application are deficient. The deficient aspects are described in detail in the attachment to this email.

As part of the 45-day completeness review outlined in 40 CFR 49.156(e)(4), we have 30 days to review your Request for Coverage for completeness and request additional information in writing. US Silica has 15 days to respond to our request for information. Your application is considered incomplete until the information is received and evaluated and we have determined that your request contains all the information needed to qualify under this general permit. If your response to our request is delayed beyond 15 days then the 90-day permit

issuance period for us to act is extended by the additional days it takes to address the deficiencies in the Request for Coverage.

We look forward to continuing to work with you on this application. If you have any questions, please contact me at (303) 312-6520 or smith.claudia@epa.gov.

Sincerely,

Claudia Young Smith
Environmental Scientist
US EPA Region 8 Air Program
Phone: (303) 312-6520
Fax: (303) 312-6064

<http://www2.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region>

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US Silica - Parshall, ND Transload Facility Diesel Storage Tank-1, Throughput Estimate

<u>Quantity</u>	<u>Value</u>	<u>Units</u>	<u>Reference</u>
Combined Power	240	HP	[1]
Max Hrly Rate	14716.8	MMBtu/yr	[2],[3]
HHV, Distillate Fuel Oil No. 1	0.139	MMBtu/gal	[4]
Gallons/year	105,876.26	Gal/yr	[5]

[1] 4 mobile non-road engines onsite, 60 hP each per vendor specifications (diesel-fired)

[2] AP-42, Table 3.3-1 Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines
Assume an average brake-specific fuel consumption rate of 7000 Btu/hp-hr

[3] hp-hr to MMBtu/hr

$$\frac{7000 \text{ Btu}}{\text{hp-hr}} \times \frac{1000000 \text{ Btu}}{\text{MMBtu}}$$

[4] 40 CFR Part 98, Subpart C, Table C-1 lists the high heat value of Distillate Fuel Oil No. 1 as 0.139 MMBtu/gallon.

[5] Example of back-calculated gallons distillate fuel oil No. 1

$$\frac{14716.8 \text{ MMBtu}}{\text{yr}} \times \frac{\text{gal}}{0.139 \text{ MMBtu}} = 105,876.26 \text{ gal/yr}$$

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Identification and Physical Characteristics

Identification

User Identification:	Tank 1
City:	Parshall
State:	North Dakota
Company:	U.S. Silica - Parshall Transload Facility
Type of Tank:	Horizontal Tank
Description:	USS Parshall Diesel Storage Tank

Tank Dimensions

Shell Length (ft):	5.00
Diameter (ft):	5.00
Volume (gallons):	500.00
Turnovers:	211.75
Net Throughput(gal/yr):	105,876.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Williston, North Dakota (Avg Atmospheric Pressure = 13.82 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

Tank 1 - Horizontal Tank
Parshall, North Dakota

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
DISTILLATE NO. 1	All	43.08	37.17	48.98	41.45	0.0047	0.0041	0.0058	130.0000			162.00	Option 1: VP40 = .0041 VP50 = .006

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

Tank 1 - Horizontal Tank
Parshall, North Dakota

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
DISTILLATE NO. 1	0.47	0.11	0.58