REGION 8

DENVER, CO 80202

Kraken Operating, LLC - Various Well Pads and Facilities
Partial Compliance Evaluation (PCE)
On-Site Clean Air Act (CAA) Inspections

Inspection Date(s):	October 22, 2024
Inspection Report Date:	December 3, 2024
EPA Representatives:	US EPA Region 8 Clean Air Act Inspectors: Alexis North, Joe Wilwerding, Bob Gallagher
State Representatives:	Jamin Grantham, Adam Bradley, Saloma Lentz
Company Representatives:	Stacy Aguirre
Inspection Report Prepared By:	Alexis North, Joe Wilwerding
Inspection Report Reviewed By:	Scott Patefield, Manager, Enforcement and Compliance Assurance Division, Air and Toxics Enforcement Branch

SCOTT PATEFIELD Digitally signed by SCOTT PATEFIELD
Date: 2024.12.03 09:21:56 -07'00'

Applicable Rules:	Administrative Rules of Montana, Title 17 Environmental Quality, Chapter 8 (link) 40 C.F.R. Part 60, Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015 40 C.F.R Part 60, Subpart OOOOa: Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 (NSPS OOOOa)

Compliance Assistance
None

Areas of Concern

1. The EPA detected hydrocarbon emissions from the storage tanks at well pads co-located with the following wells:

- Warren 15-22

2. The EPA detected hydrocarbon emissions from an unlit flare co-located with the following wells or compressor sites:
   - None

3. The EPA detected unburned hydrocarbon (UBHC) emissions from operating utility flares co-located with the following wells:
   - None

4. The EPA detected visible emissions from operating utility flares co-located with the following wells:
   - None

See Table 1 below for more details regarding inspected locations and Tables 3 and 4 for inspection observation details for all pads. A log of images and videos captured during the inspections is provided in Appendix A.

General Inspection Information

Announced well pad inspections were conducted jointly by U.S. EPA and Montana State inspectors on October 22, 2024, at multiple Kraken Operating, LLC (Kraken) facilities located in the Northeast portion of the State of Montana.

The EPA evaluated each well site listed in Table 1 using audio, visual, and olfactory (AVO) inspection methods including the use of an optical gas imaging (OGI) camera and EPA Reference Method 22. At each facility, inspectors scanned the crude and/or water storage tanks, closed vent system and flares onsite for any detectable emissions. Specifically, inspectors scanned storage tank covers and closed vent systems for hydrocarbon emissions to determine compliance with the Clean Air Act, including the Administrative Rules of Montana and NSPS OOOO/a.

Each well pad inspection followed the approach below:

1. Record the entry sign of the well pad when available. Survey the entire well pad with OGI camera.
2. Record the number and type of site process equipment such as well heads, tanks, and emission control devices.
3. Record AVO indications of emissions from the storage tanks, closed vent system to the control devices and control devices.
4. Using the OGI camera, survey each process in infrared modes (auto, manual, and/or high-sensitivity modes). Record any uncontrolled emissions with the OGI camera and describe the frequency and magnitude of emissions in the field notebook.
5. Observe control devices (enclosed combustor or utility flare) for visible emissions. If there is visible emissions present, conduct Method 22 and record the observations.
6. Using another OGI camera, confirm any observations of uncontrolled emissions with another inspector.
7. If there are operators present onsite, share any Areas of Concern.

Table 1 lists general inspection and facility details for each inspected facility. The well pad information located in the Table 1 is from the Montana Board of Oil and Gas online data base located at https://bogapps.dnrc.mt.gov/dataminer/Production/ProductionByWell.aspx .

Table 1: Inspection and Facility Details of Facilities Inspected

Date	Arrival Time	Departure Time	Facility Name	Well State ID	Latitude	Longitude
10/22/2024	09:53	10:05	Breaks 17-20 1H	25083230440000	-104.388	48.01145
10/22/2024	10:49	10:56	Verrene 15 22 1tfh	25083229160000	-104.21	47.92526
10/22/2024	11:04	11:09	Leviathan SW	25083233520000	-104.14	47.92626
10/22/2024	11:22	11:32	Fletch CTB	25083233590000, 25083233600000, 25083233610000, 25083233620000	-104.129	47.95585
10/22/2024	11:37	11:52	Leviathan South Pad	25083233460000, 25083233470000, 25083233450000	-104.116	47.9554
10/22/2024	11:55	12:05	Eagle CTB	25083233550000, 25083233560000, 25083233450000, 25083233570000, 25083233580000	-104.103	47.95388
10/22/2024	12:54		Leviathan North	25083233480000, 25083233490000, 25083233500000,	-104.117	47.99706
10/22/2024	13:26	13:39	Sundheim 26-35	25083230590000	-104.057	47.89519
10/22/2024	13:50	14:12	Warren 15–22	25083234410000, 25083234420000, 25083234430000, 25083234390000, 25083234400000	-104.081	47.92678

Observations and Regulatory Applicability

The Administrative Rules of Montana and NSPS OOOO/a regulations which are potentially relevant to the Areas of Concern observed during inspections are summarized in this section.

Tables 3 and 4 at the end of this report summarize inspection observations and findings. Table 3 includes facility storage tank information and observations. Table 4 includes details of control devices and related observations. See Appendix A for a log of images and videos taken during the inspections.

Administrative Rules of Montana Applicability

The following emissions control requirements apply to the Kraken facilities inspected by EPA and the State of Montana:

17.8.1603 Emission Control Requirements

Per 17.8.1603(1)(b), "VOC vapors greater than 500 BTU/scf from oil and condensate storage tanks with the PTE of 15 TPY or greater must be captured and routed to a gas pipeline, or if a gas pipeline is not located within a 1/2 mile of the oil and gas well facility, VOC vapors greater than 500 BTU/scf from storage tanks with the PTE of 15 TPY must be captured and routed to

emissions minimizing technology, or to a smokeless combustion device equipped with an electronic ignition device or a continuous burning pilot system."

17.8.1710 Oil or Gas Well Facilities General Requirements
Per 17.8.1710(3), "(3) The owner or operator of a registered oil or gas well facility shall operate all emissions control equipment to provide the maximum air pollution control for which it was designed."

17.8.1711 Oil or Gas Well Facilities Emission Control Requirements
Per 17.8.1711(1)(a), "VOC vapors of 200 Btu/scf or greater from each piece of oil or gas well facility equipment, with a PTE greater than 15 tpy, must be captured and routed to a gas pipeline, routed to a smokeless combustion device equipped with an electronic ignition device or a continuous burning pilot system, meeting the requirements of 40 CFR 60.18, and operating at a 95% or greater control efficiency, or routed to air pollution control equipment with equal or greater control efficiency than a smokeless combustion device. The phrase "oil or gas well facility equipment" includes, but is not limited to, wellhead assemblies, amine units, prime mover engines, phase separators, heater treatment units, dehydrator units, tanks, and connecting tubing, but does not include equipment such as compressor engines used for transmission of oil or natural gas".

NSPS OOOOa Applicability
EPA assembled data on well production information reported to the Montana Board of Oil and Gas, tank emission calculations using the Kraken Williams CTB Flash Gas Factor (10.89 scf/bbl) and the North Dakota Bakken Flash Gas Factors, and the first date production of each of the sites in Table 2.

The Kraken Williams CTB Flash Gas Factor was used as the one example factor in the inspectors' possession from a Kraken facility. The North Dakota Flash Gas Factor was used as the default factor for the Bakken formation in North Dakota (all except Verrene produce from Bakken formation). The 12 months from Table 2 below span the period from September 2023 through August 2024. The calculations below use the North Dakota calculation and default inputs shown below:

((Oil*Flash Gas Factor)/Ideal Gas Constant)*VOC MW*VOC wt%*(%DRE)*1/2000

Ideal Gas Constant	379 scf/lb-mol
ND default oil tank VOC MW	45.19 lb/lb-mol
ND default oil tank VOC wt%	0.798 or 79.8%
ND default flash gas factor	97.91 scf/bbl
Kraken Williams CTB flash gas factor	10.89 scf/bbl
DRE (flare destruction efficiency)	0.98 or 98%

Table 2: Site Oil Production, First Date of Operation, Emissions, and other Information

Facility Name	First Date of Oil Production	Date of Any Well Additions	Formation	12-Month Uncontrolled Tank Emissions Estimate		12-Month Controlled Tank Emissions Estimate	
				10.89 scf/bbl	97.91 scf/bbl	10.89 scf/bbl	97.91 scf/bbl
Breaks 17-20 1H	3/1/2013		Bakken	3.47	31.16	0.07	0.62

Verrene 15 22 1tfh	4/1/2012	2/1/2024	Three Forks	1.56	14.02	0.03	0.28
Leviathan SW	6/1/2018		Bakken	20.44	183.80	0.41	3.68
Fletch CTB	2/1/2018	4/1/2019	Bakken	43.73	393.21	0.87	7.86
Leviathan South Pad	2/1/2018		Bakken	16.91	152.06	0.34	3.04
Eagle CTB	2/1/2018	3/1/2019	Bakken	36.63	329.34	0.73	6.59
Leviathan North	6/1/2018		Bakken	49.75	447.31	1.00	8.95
Sundheim 26-35	9/1/2013	6/1/2014	Bakken	20.32	182.73	0.41	3.65
Warren 15–22	8/1/2023		Bakken	447.65	4024.73	8.95	80.49

Under NSPS OOOOa, each storage vessel that commenced construction, reconstruction, or modification after September 18, 2015, and on or before November 16, 2020, is a storage vessel affected facility if its potential for VOC emissions is equal to or greater than 6 tons per year (tpy). The potential for VOC emissions must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput (as defined in § 60.5430a) determined for a 30-day period prior to the applicable emission determination deadline. The determination may take into account requirements under a legally and practicably enforceable limit in an operating permit or other requirement established under a Federal, state, local, or tribal authority. Sites with storage vessel affected facilities must meet the following requirement:

Closed Vent System Equipment Requirements [§ 60.5411a(c)]
Per § 60.5411a(c)(1), owners and operators must "Design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that meets the requirements specified in § 60.5412(c) and (d), or to a process."

Control Device Requirements [§§ 60.5412a(d) and 60.5413a(e)]
Per § 60.5412a(d)(1)(ii), owners and operators must, for each combustion control device, "install and operate a continuous burning pilot flame."

Per § 60.5413(a)(e)(8), owners and operators must, "Operate each control device following the manufacturer's written operating instructions, procedures and maintenance schedules to ensure good air pollution control practices for minimizing emissions."

Per § 60.5412a(d)(1)(iii), owners and operators must, "Operate the combustion control device with no visible emissions, except for periods not to exceed a total of 1 minute during any 15-minute period."

Table 2: Inspection Details: Storage Tank Observations				
Facility Name	**Number of Storage Tanks**	**AVO (Audio, visual, olfactory) Observations**	**Additional Notes**	**Media File Name**
Breaks 17-20 1H	3	No emissions	N/A	N/A
Verrene 15 22 1tfh	4	No emissions	N/A	N/A
Leviathan SW	12	No emissions	N/A	N/A
Fletch CTB	14	No emissions	N/A	N/A
Leviathan South Pad	18	No emissions	N/A	N/A
Eagle CTB	14	No emissions	N/A	N/A
Leviathan North	18	No emissions	N/A	N/A
Sundheim 26-35	8	No emissions	N/A	N/A
Warren 15–22	10	Open thief hatch with significant emissions	Workers said maintenance going on, closed hatch.	MOV3609. MOV3610 is post hatch closure showing no emissions.

Table 4: Control Devices and Related Observations					
Facility Name	**Flare 1 Type**	**Quantity of Flare 1 Type**	**Flare 2 Type**	**Quantity of Flare 2 Type**	**Combustion Control Device Notes**
Breaks 17-20 1H	High Pressure Steffes	1	Low Pressure Steffes	1	Hi and lo Steff are operating; no emissions; no black smoke
Verrene 15 22 1tfh	Low Pressure Steffes	1	High Pressure Steffes	1	Both cold; site shut-in.
Leviathan SW	High/Low Pressure Steffes	1			Flame visible; no smoke
Fletch CTB	High Pressure Steffes	1	Low Pressure Steffes	1	Flames on both flares; no smoke
Leviathan South Pad	High/Low Pressure Steffes	1			Produced gas going to hp flare with big pressure and big flame

Eagle CTB	High/Low Pressure Steffes	1	Low Pressure Steffes; air assist	1	Both flares operating with flames
Leviathan North	High/Low Pressure Steffes	1			Flare operating; Temp 1009°
Sundheim 26-35	High/Low Pressure Steffes	1	Low Pressure Steffes	1	Associated gas flaring
Warren 15–22	Cimmaron High/Low Pressure; air assist	1			

APPENDIX A: Photograph and Video Log

Media File	Description	Well Name
MOV_3599.mp4	Site overview video	Kraken Breaks 17-20 1H
MOV_3600.mp4	Site overview video	Kraken Verrene 15 22 1tfh
MOV_3601.mp4	Site overview video	Kraken Leviathan SW
MOV_3602.mp4	Site overview video	Kraken Fletch CTB
IMG_0006	Sign	Kraken Fletch CTB
IMG_0007	Air assisted flare	Kraken Fletch CTB
IMG_0008	Flare temp reading	Kraken Fletch CTB
IMG_0009	Flare temp reading	Kraken Fletch CTB
IMG_0010	Flare temp reading	Kraken Fletch CTB
MOV_3603.mp4	Site overview video	Kraken Leviathan South Pad
IMG_0011	Site flare	Kraken Leviathon South
IMG_0012	Flare temp reading	Kraken Leviathon South
MOV_3604.mp4	Site overview video	Kraken Eagle CTB
IMG_0013	Sign	Kraken Eagle CTB
IMG_0014	Tanks	Kraken Eagle CTB
IMG_0015	Pump jacks	Kraken Eagle CTB
IMG_0016	Air assisted flares	Kraken Eagle CTB
IMG_0017	Flare temp reading	Kraken Eagle CTB
IMG_0018	Air assisted flare	Kraken Eagle CTB
IMG_0019	Flare temp reading	Kraken Eagle CTB
MOV_3606.mp4	Site overview video	Kraken Leviathan North
IR_3607.jpg	Large flare combustion	Kraken Sundheim 26-35
MOV_3608.mp4	Site overview video	Kraken Sundheim 26-35
MOV_3609.mp4	Open thief hatch with significant emissions	Kraken Warren 15–22
MOV_3610.mp4	Post hatch closure showing no emissions.	Kraken Warren 15–22

REGION 8
DENVER, CO 80202

INSPECTION REPORT

NESHAP 6C: Gasoline Dispensing Facility Inspection

Attached please find the United States Environmental Protection Agency's (EPA's) inspection report of your inspected facility and/or any related fuel delivery inspections identified therein. EPA is providing this report as a matter of agency policy and will contact you again only if needed.

Without making a determination that your business or organization is a small business, EPA is also providing you with a link to this Small Business Resources Information Sheet (https://www.epa.gov/compliance/small-business-resources-information-sheet) which provides an array of resources to help small businesses understand and comply with federal and state environmental laws.

Inspection Information	
Inspection Number:	**R8_CAA_2024_0912_03**
Inspection Date(s):	September 12, 2024
Regulatory Program(s):	40 C.F.R. Part 63, Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (NESHAP 6C)
EPA Region/Program Conducting Inspection:	EPA Region 8, Enforcement and Compliance Assurance Division, Air and Toxics Enforcement Branch
Company Name:	Pueblo West Kwik Stop Inc.
Facility Name:	Kwik Stop #7
Facility Physical Location (Street Address, building / unit #):	101 S. McCulloch Blvd
(city, state, zip code):	Pueblo, CO 81007

Inspector and Approval

Katelyn Bergl	Inspector	KATELYN BERGL Digitally signed by KATELYN BERGL Date: 2024.11.19 17:43:49 -07'00'
Field Inspector Name	Title	Signature
Scott Patefield	Branch Manager	SCOTT PATEFIELD Digitally signed by SCOTT PATEFIELD Date: 2024.11.19 16:22:40 -07'00'
Name of Approving Official	Title	Signature

FACILITY INSPECTION DETAILS AND OBSERVATIONS

General Facility Information			
Gasoline Dispensing Facility			
Facility Name:	Kwik Stop #7	Parent Company Name:	Pueblo West Kwik Stop Inc.
AIRS-ID:	None	CAA Permit (if any):	This facility does not have a CAA permit, APEN, or APEN Exempt Memo on file
Primary Facility Representative & Title:	Tami Miller Store Manager	On-site Facility Representative & Title:	Tami Miller Store Manager
Facility Contact Phone/Email:	pueblowestks@hotmail.com (719) 547-1770	On-site Contact Phone/Email:	Same
Facility Address:	101 S. McCulloch Blvd, Pueblo, CO 81007		
Enforcement and Compliance History:	None		
Fuel Delivery Company			
Fuel Supply Company Name:	Groendyke Transport	Trucking Company Name (if different):	Suncor Energy
Truck Identifier:	8501	Trailer Identifier:	14-1338
Fuel Supply Company Representative & Title:	Chris Pape Vice President of Safety	Driver Name:	Thomas Sharp
Fuel Supply Company Contact Phone/Email:	Cpape@groendyke.com		
Fuel Supply Company Address:	1833 E Platteville Blvd, Pueblo West, CO 81007		
Enforcement and Compliance History:	None		

<table>
<tr><th colspan="5">General Inspection Information</th></tr>
<tr><td>Inspection Number/ID:</td><td>R8_CAA_2024_0912_03</td><td>Inspection Date</td><td colspan="2">9/12/2024</td></tr>
<tr><td>Inspector(s):</td><td>Katelyn Bergl (EPA)</td><td>Arrival/Departure Time</td><td>2:50 PM</td><td>4:35 PM</td></tr>
<tr><td>Time Inspector Presented Credentials:</td><td>2:55 PM</td><td rowspan="4">Administrative Inspection Items:</td><td>☒ Announced</td><td>☐ Unannounced</td></tr>
<tr><td rowspan="2">Permission to Enter Facility Granted? If Yes, by whom? If No, explain.</td><td>☒ Yes ☐ No</td><td colspan="2">☒ CBI Procedures Discussed</td></tr>
<tr><td rowspan="2">Tami Miller</td><td colspan="2">☒ SBREFA Form Provided</td></tr>
<tr><td colspan="2">☐ Other materials or compliance assistance provided (describe):</td></tr>
<tr><td>Photographer Name:</td><td>Katelyn Bergl</td><td>Photograph Range:</td><td colspan="2">MOV_3554 - 3560;
IMG_0171 - 0187</td></tr>
<tr><td>Weather & Other General Site Observations:</td><td colspan="4">Mostly Clear, 86 deg F, winds 11 mph SW</td></tr>
<tr><td>Inspection Narrative:</td><td colspan="4">The facility was inspected under the Clean Air Act (CAA) for compliance with 40 C.F.R. Part 63, Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (NESHAP 6C). Inspection activities included observation of a fuel delivery event by the EPA inspector and a request for records required to be maintained under NESHAP 6C.</td></tr>
<tr><td>Areas of Concern:</td><td colspan="4">The following are areas of concern identified during the inspection or records review:
1. An Air Pollutant Emissions Notice, or APEN, has not been submitted to the Colorado Department of Public Health and Environment's (CDPHE) Air Pollution Control Division (APCD). Typically, APENs are required upon startup and must be updated every 5 years for this source category.

2. According to records submitted by the company, this facility had a monthly gasoline throughput greater than 100,000 gallons per month from October 2019 through September 2024. Therefore, in October 2019, the facility became subject to the NESHAP 6C control requirements of 40 CFR § 63.11118 – Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

NESHAP 6C at 40 CFR § 63.11113(c) clarifies that existing sources which become subject to the control requirements of 40 CFR § 63.11118 due to an increase in the monthly throughput must comply with the additional requirements, including installation of a vapor balance system and initial performance testing to demonstrate compliance, no later than three years after the source becomes subject. In this case, the facility appears to have triggered the control requirements on or before October 2019, and must have complied with 40 CFR § 63.11118 no later than October 2022. The facility was unable to provide records of the required performance tests under</td></tr>
</table>

NESHAP 6C to demonstrate initial or continued compliance.

In an email exchange regarding inspection records, a facility representative stated on September 17, 2024, that the facility's environmental compliance contractor communicated to the facility that they are familiar with these requirements for facilities located in Denver but did not realize that facilities outside of Denver could be subject to the vapor balance and performance testing requirements. Although CDPHE imposes more stringent requirements for gasoline dispensing facilities within the ozone non-attainment Denver Metro area, the NESHAP 6C vapor balance system and associated testing requirements are applicable nationwide for facilities that exceed the 100,000 gallon per month threshold.

3. For gasoline dispensing facilities with gasoline throughput greater than 100,000 gallons per month, Items 1(g) and 1(h) of Table 1 of NESHAP 6C apply:

   1(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.

   1(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:

   $P_f = 2e^{-500.887/v}$

   Where:

   P_f *= Minimum allowable final pressure, inches of water.*

   v *= Total ullage affected by the test, gallons.*

   e *= Dimensionless constant equal to approximately 2.718.*

   2 = The initial pressure, inches water.

   To demonstrate compliance with Items 1(g) and 1(h) of Table 1 of NESHAP 6C, 40 CFR § 63.11120(a) requires that a performance test using Test Procedure TP-201.1E and Test Procedure TP-201.3 is conducted initially and every three years thereafter. The facility has not conducted either performance test at any time and has not demonstrated compliance, initially or thereafter, with the above-described requirements.

	4. Components of the tank and associated vapor equipment were not vapor tight during the fuel delivery event, as required by Item 1(b) of Table 1 of NESHAP 6C. The following emissions were observed during the fuel delivery portion of EPA's inspection: a. Vapors were observed from the regular unleaded (RUL) and premium fill pipes & spill buckets prior to poppet cap removal or fueling. b. During RUL fueling, vapors were observed from the RUL fueling spill bucket, the RUL vapor recovery spill bucket, an adjacent automatic tank gauging (ATG) system spill bucket, and the tank vapor vents. Vapors from the ATG and vapor vents were significant. c. Vapors were observed from RUL vapor recovery pipe after fueling was complete but before the pipe cap was replaced.

Records Review: Gasoline Throughput and NESHAP 6C Testing Records						
Applicable Throughput Category:						
☐ Calculated based on volume of gasoline loaded into all storage tanks			**☒ Calculated based on volume of gasoline dispensed from all storage tanks**			
☐ <10,000 gallons per month	☐ ≥ 10,000 gallons per month and < 100,000 gallons per month		**☒ ≥ 100,000 gallons per month**			
Date Applicable Throughput Category Was Exceeded:	Based on records provided since 2019, the facility exceeded the 100,000 gallons per month throughput threshold on or before October 2019.					
Records: All Facilities regardless of throughput	**Notes**					
☒ 5-Year Throughput Records Available (5-year records must be maintained and made available within 24 hours of request)	Throughput records for this facility from October 2019 – September 2024 were provided via email by Tami Miller on September 17, 2024.					
☒ Last 12-month rolling throughput calculation	Provided along with 5-year throughput records					
Records: Facilities ≥ 100,000 gallons per month	**Notes**					
☐ 3 -year Leak Rate and Cracking Pressure Test (CARB Test Procedure TP-201.1E, - Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, or equivalent)	Date of Last Test:	Never	Results of Last Test:	Pass / Fail	Report Provided:	Yes / No
	This NESHAP 6C performance test was required no later than October 2022, but had not been completed at the time of the EPA inspection.					

☐ Static Pressure Test (CARB Test Procedure TP-201.3, - Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, or equivalent)	Date of Last Test:	Never	Results of Last Test:	Pass / Fail	Report Provided:	Yes / No
	This NESHAP 6C performance test was required no later than October 2022, but had not been completed at the time of the EPA inspection.					

Fuel Delivery Truck Compliance (Gasoline Cargo Tanks under NESHAP 6C)			
Fuel Type(s) Delivered:	1) Regular Unleaded (RUL) 2) Diesel	Amount of Fuel Delivered:	1) 5,000 gallons 2) 3,000 gallons
Annual Certification Test – Vapor Tightness Testing – EPA Method 27 of appendix A-8 to part 60 of CAA			
Date of Last Test:	04/01/2024	5-Year Test Record Availability:	☒ Available with truck ☐ Available at office or central location ☐ Not Available ☐ Other:
Results of Test:	Pass		

Fuel Delivery Event Observation:

A fuel delivery event was observed by the EPA inspector. The inspector used a forward-looking infrared (FLIR) camera to record optical gas imaging (OGI) videos of gasoline vapors. Any auditory, visual, and olfactory (AVO) observations were also recorded. See Appendix A for a list of photographs and videos recorded during the fuel delivery inspection.

Components of the refueling activity which were observed:		**Description/Observations (including any OGI or AVO observations)**
☒	Conditions of Equipment prior to refueling event	Vapors were observed from the RUL and premium fill pipes & spill buckets prior to poppet cap removal or fueling.
☒	Connection of fuel and vapor lines prior to fuel transfer	
☒	Maintenance of fuel and vapor line connections during fueling event	During RUL fueling, vapors were observed from the RUL fueling spill bucket, the RUL vapor recovery spill bucket, an adjacent automatic tank gauging (ATG) system spill bucket, and the tank vapor vents. Vapors from the ATG and vapor vents were significant.
☒	Disconnection of fuel and vapor lines after fuel transfer	
☒	Conditions of Equipment after refueling event	Vapors were observed from RUL vapor recovery pipe after fueling was complete but before the pipe cap was replaced.

Documents Requested			
Document(s)	**Status**		**Notes/Comments**
5-year fuel throughput records including previous 12-month fuel throughput calculation	☒ Document(s) Provided ☐ Will Provide After Inspection	☐ Document(s) Denied ☐ Other (see notes)	
EPA Method 27 for the fuel delivery truck	☒ Document(s) Provided ☐ Will Provide After Inspection	☐ Document(s) Denied ☐ Other (see notes)	
Most recent NESHAP 6C Performance Tests	☐ Document(s) Provided ☐ Will Provide After Inspection	☐ Document(s) Denied ☒ Other (see notes)	Documents not available; testing not completed.

APPENDIX A: Photograph and Video Log

File Name	Description	Photographer
MOV_3554.mp4	Vapors were observed from the RUL fill pipe & spill bucket prior to poppet cap removal or fueling. Also see IMG_0183.MOV demonstrating liquid in the spill bucket.	K. Bergl
MOV_3555.mp4	Vapors were observed from the premium fill pipe & spill bucket prior to poppet cap removal or fueling. Also see IMG_0182.MOV demonstrating liquid in the spill bucket.	K. Bergl
MOV_3556.mp4	Vapors were observed from RUL fill and vapor spill buckets during RUL fueling.	K. Bergl
MOV_3557.mp4	Significant vapors were observed from automatic tank gauging (ATG) spill bucket during RUL fueling.	K. Bergl
MOV_3558.mp4	Vapors were observed from pressure/vacuum (P/V) vent during RUL fueling.	K. Bergl
MOV_3559.mp4	Vapors were observed from RUL vapor spill bucket during RUL fueling. The driver disconnected the fuel line during the video, so additional vapors from the fuel hose are seen in the video.	K. Bergl
MOV_3560.mp4	Vapors were observed from RUL vapor recovery pipe after fueling was complete but before the pipe cap was replaced.	K. Bergl
IMG_0171.JPG	Tank vapor vent stacks for the RUL, premium, and diesel fuel tanks.	K. Bergl
IMG_0172.JPG	Tank vapor vent stacks for the RUL, premium, and diesel fuel tanks.	K. Bergl
IMG_0173.JPG	General refueling area prior to fuel delivery.	K. Bergl

IMG_0174.JPG	General refueling area prior to fuel delivery.	K. Bergl
IMG_0175.JPG	General refueling area prior to fuel delivery.	K. Bergl
IMG_0176.JPG	Diesel tank fill and vapor recovery equipment.	K. Bergl
IMG_0177.JPG	Premium tank fill and vapor recovery equipment.	K. Bergl
IMG_0179.JPG	RUL tank fill and vapor recovery equipment.	K. Bergl
IMG_0180.JPG	Fuel truck: Trailer identifier	K. Bergl
IMG_0181.JPG	Fuel truck: Truck identifier	K. Bergl
IMG_0182.MOV	Liquid observed in the premium spill bucket prior to fuel delivery.	K. Bergl
IMG_0183.MOV	Liquid observed in the RUL spill bucket prior to fuel delivery.	K. Bergl
IMG_0184.MOV	Condition of the ATG where significant emissions were observed. Significant rust can be seen throughout the equipment.	K. Bergl
IMG_0185.JPG	Condition of the RUL vapor recovery equipment after delivery. Vapors were observed from the component after delivery.	K. Bergl
IMG_0186.MOV	Condition of the RUL vapor recovery pipe cap after delivery. Vapors were observed from the component after delivery.	K. Bergl
IMG_0187.MOV	Condition of the RUL vapor recovery equipment after delivery. Vapors were observed from the component after delivery.	K. Bergl

NPDES Inspection Report – Industrial User

Name of industry and location:	**Control authority / Permit No. / Facility ID:**
L&H Industrial 1901 Commercial Avenue Sheridan, Wyoming 82801	City of Sheridan Facility does not have a City Pretreatment Industrial User Permit. NPDES ID: WYP000019 Inspection ID: 202311_WYP000019
Date of visit:	**Time of visit:**
November 7, 2023	1:00 pm – 2:18 pm

Name(s) / Affiliation of inspector(s):

Stephanie Passarelli / U.S. Environmental Protection Agency, Region 8 (lead inspector)
Al Garcia / U.S. Environmental Protection Agency, Region 8
Brian Edwards / City of Sheridan

Name / Title / Affiliation:

Jay Will / General Manager / L&H Industrial – Sheridan
Jason Percifeld / Chief Operating Officer / L&H Industrial

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
STEPHANIE PASSARELLI Digitally signed by STEPHANIE PASSARELLI Date: 2024.01.29 14:32:12 -07'00'	**U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202**	**01/16/2024**
Stephanie Passarelli	**303-312-6803**	
Reviewer Name	Address/Phone Number	Date
Al Garcia	**U.S. EPA Region 8 1595 Wynkoop Street 8WD-CWW Denver, Colorado 80202**	**01/18/2024**
	303-312-6382	
Supervisor Signature/Name	Address/Phone Number	Date
EMILIO LLAMOZAS Digitally signed by EMILIO LLAMOZAS Date: 2024.01.29 15:28:58 -07'00'	**U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202**	**01/25/2025**
Emilio Llamozas	**303-312-6407**	

Inspection Description:

On November 7, 2023, U.S. Environmental Protection Agency (EPA) inspectors Stephanie Passarelli and Al Garcia (jointly referred to as inspectors) and the City of Sheridan (City) inspector Brian Edwards conducted an industrial user (IU) inspection of L&H Industrial (facility) located at 1901 Commercial Avenue Drive, Sheridan, Wyoming. The IU inspection was conducted as part of the EPA evaluation of the City's Publicly Owned Treatment Works (POTW) and the need for the City to develop an EPA-approved Pretreatment Program. Additionally, L&H Industrial was identified as a potential facility to inspect based on information received in response to EPA's Clean Water Act (CWA) Section 308 information request, and to review the site's self-declared no-discharge status. The inspectors conducted an announced inspection to ensure L&H Industrial management from Gillette, Wyoming could be in attendance.

Upon arrival at the facility on November 7, 2023, at approximately 1:00 pm, the inspectors conducted the opening conference, presented their inspector credentials to the facility representatives, and explained the general purpose and procedures of the inspection. During the opening conference, Mr. Will provided an overview of the facility's operations and processes at the Sheridan facility, reviewed waste streams generated and management of these waste streams.

Following the opening conference, a facility tour was provided to visually inspect the unit processes discussed. To document and record the conversation and inspection observations, the inspectors took notes using checklists with questions applicable to the industrial user. Photographs taken during the inspection are included in the attached photo log.

EPA inspectors conducted a closing conference with facility representatives and provided general observations and preliminary findings from the inspection. The EPA and City representative left the facility at approximately 2:18 pm.

1. What does this industry produce?

L&H Industrial provides design, custom manufacturing, and comprehensive services for heavy industrial machinery used in mining, oil and gas, railroad, and other industries. The facility conducts welding, machining, hard chrome plating, mechanical assembly, and painting operations.
Approximately 32 individuals are employed at L&H Industrial – Sheridan working one day-shift Monday through Friday; and two people working a night-shift Monday through Thursday.

2. How is the industry classified by the POTW?

The POTW does not currently have an approved Pretreatment program.

EPA had identified the facility as a IU subject to the National Pretreatment Regulations found at 40 C.F.R part 403 and potentially, the Metal Finishing Subcategory pretreatment regulations found at 40 C.F.R part 433 and sent a CWA Section 308 information request to gather more information on L&H's processes. A pretreatment industrial user permit has not been issued to date for this facility.

3. Have there been any significant changes in processes or flow?

The facility has not had any change in operations since 2006 when operations began at this location.
The facility does not have any planned changes in processes.

4. What raw materials are used?

The facility uses the following materials:

- Stainless steel
- Steel

5. What processes are used to make the product(s)? Indicate any wastes generated and destination of wastes.

L&H Industrial conducts welding, machining, hard chrome plating, mechanical assembly, and painting operations per customer specifications.

Raw materials and chemicals are received on the Northeast corner of the building and distributed to the appropriate department - painting, machining, assembly, or plating - depending on the final product order.

Steam Cleaning: Some products received at the facility require removal of dust/debris. A steam cleaner is in the receiving area in northwest corner of the facility. Any residual steam/rinse water resulting from the cleaning process is directed to and collected in the sump pit. Mr. Will indicated rinse water remains in confined sump (see Photo 126) and allowed to evaporate in place or removed approximately once per year by pumping sump liquids and solids to 55-gallon drums and hauled off site by Mountain States Environmental Services, Inc. (MSEC). Mr. Will indicated both solid and liquids from the rinse sump were recently disposed of off-site by MSEC. At the time of inspection, the steamer hose was observed unattended and dripping water for an unknown period, allowing pressure washer water to puddle in the receiving area and directed to the sump.

Manufacturing Operations:

The machining shop is located on the south half of the facility and consists of approximately six (6) CNC and ten (10) manual milling and lathe machines, grinders, polisher, inspection benches and chemical and materials storage. Small quantities of wastes are generated from this area include spent trimsol cutting fluid/coolant. Mr. Will indicated the used coolant is collected in 55-gal drums and transferred to facility in Gillette for disposal. L&H does not currently document quantities or frequencies of spent coolant that is transferred to Gillette. Used oil is also collected in 55-gal drums, stored, and hauled off-site by MSEC per records review and manifests submitted with the CWA Section 308 request response to document used oil disposal. Facility representatives indicated that no wastewater is used in or discharged from these process lines.

The welding shop and hydraulic cylinder repair shops are located adjacent to machining shops, inspectors did not observe use of any process waters or production of wastewater. Any solid wastes such as dirty rags,

floor sweepings, etc that are considered non-hazardous are disposed in the trash as appropriate. Any metal cuttings or turnings are stored onsite and recycled when containers are full. The CWA Section 308 request response indicated that metal cuttings and turning are recycled by Zowada Recycling and Steel.

Painting processes are conducted in wet paint booth. Paint products are stored in lockers in same area and hold small quantities of chemicals such as 5-gallon buckets of xylene, which are used to clean paint tips after color changes.

Hard Chrome Plating: Following fabrication or repair, hydraulic cylinder components requiring plating are transported to the plating area on the West side of facility. The caustic stripping tank is used to remove any paint from products. The tank has a capacity of 540 gallons including its own secondary containment (Photo 135). Per facility representatives, and the CWA Section 308 request response records reviewed, spent solids from the caustic stripping tank are hauled off-site by MSEC Inc. Caustic stripping tank liquids are removed as they become spent, approximately once per year (manifests showed removal in May 2022 and May 2023).

The plating line consists of three chrome plating tank baths – Tank A and Tank B are used for smaller sized parts (Photo 134); both are 12-foot depth tanks with two cells per tank with approximate capacity of 2,600 gallons each. Tank C (Photo 132) is used for larger cylinder components, with a tank capacity of approximately 4,500 gallons. After being dipped in plating baths, products are allowed to drip dry over the tanks to prevent any drag out.

Following plating, products requiring rinsing, are rinsed over the plating rinse sump pit, which has an approximately 800-gallon capacity, next to plating tanks A&B and the caustic strip tank (Photo 127 and Photo 136). Mr. Will indicated rinse waters collected in the sump remain in place and if possible, allowed to evaporate, or about every two weeks, are pumped to barrels and transferred to the evaporator unit adjacent to plating line to burn off the rinse liquids. Sludge from the plating rinse sump is collected in 55-gallon drums and per records review submitted with the CWA Section 308 request response, are hauled off-site by MSEC Inc. As needed, plating tanks are replenished with water supplied from the City, and chromium flake additives to increases chromic acid levels in the tank. Facility representatives indicated the plating tank baths were changed very infrequently, approximately every 10 years, and were predominately topped off or replenished if needed. When a tank is turned over, or emptied completely for cleaning, any chrome sludge and chrome tank liquid remaining is collected in drums and hauled off site by MSEC Inc. The manifests reviewed indicated that chrome sludge and liquids were last removed from the site in 2021.

Wastewater collected in either the power wash sump or plating rinse sump are pumped into barrels and transported to the evaporation unit located adjacent to plating line (Photos 128 and 130). Liquid is placed in the evaporator as the disposal method, condensation is directed to air scrubbers in the mezzanine (Photos 129 and 131), filters collect any residual metals in the condensation and prior to release to the atmosphere. Air scrubber filters are replaced approximately every two years and stored in barrels located next to the unit to await disposal. Mr. Will indicated that at the time of inspection, the evaporator unit had been off-line for a brief period earlier in the week. Seven barrels of rinse water were in place waiting for evaporation (Photo 130). According to Mr. Will, it is not typical for the facility to have multiple barrels

waiting for disposal. Additionally, if needed, waste evaporator liquid stored in containers can be hauled and disposed off-site by MSEC Inc. Manifests showed evaporator liquid was last removed by MSEC in 2021.

Any residual byproduct wastes from the plating process – including tape debris with chrome and waste wood contaminated with chrome – are stored in barrels and once full are picked up and disposed of by MSEC Inc. (per records review last disposal occurred in May 2023).

Finally, the mechanical assembly area is located on the northwest side of the facility, adjacent to the loading/unloading area. Finished products are then delivered to customers. No wastewater is used or discharged from this process line.

6. Where is water used and what is the source of the water (city, well, river, etc.)?

The facility is provided water from the City of Sheridan for domestic and process uses. Water supply is used to power wash products in receiving, replenish plating baths and rinse plated products.

7. Describe the processes which discharge wastewater.

The facility does not discharge any process wastewater, only domestic wastewater is discharged. Process wastewater produced is collected in barrels and transferred to the evaporator unit for disposal/to burn off or hauled off-site by approved disposal companies. Disposal manifests are kept at the facility.

8. Describe the sample location. Are the CA and industry using the same location?

Based on observations from the inspection, the facility does not discharge process wastewater regulated by the Metal Finishing Categorical Pretreatment Standards found in 40 CFR 433 and therefore is not required to conduct sampling of these regulated process wastewaters. All process wastewaters are contained within a closed-loop system.

9. Describe the treatment system in place.

Based on the observations of the inspection, the IU does not discharge process wastewaters regulated by the Metal Finishing Categorical Pretreatment Standards found in 40 CFR 433 and only domestic wastewater is discharged to the City of Sheridan. The facility has installed and operates an evaporation system to ensure it maintains its no-discharge status, as described below:

Wastewater from the pressure washer is directed to the sump directly adjacent and remains in place to be evaporated or is pumped out to barrels for approved disposal by MSEC.

Wastestream generated from turning over the plating tanks or stripping tanks are pumped to barrels and hauled off site for disposal by MSEC as shown on manifests in the records reviewed.
Process wastewater from rinsing of plating lines is collected in the plating rinse sumps, pumped to barrels, and transferred to the evaporator unit. Residual metals in condensation following evaporation units are captured in filters in the air scrubbing units located on the upper mezzanine. Used filters, and dust from clean-up in the area are collected in barrels and hauled off-site for proper disposal.

10. What chemicals are maintained at the facility? How are they stored? Is adequate spill prevention in place?

The facility submitted the inventory of all chemicals on-site with the CWA Section 308-information request response. Chemicals and storage confirmed on-site included small quantities of acetone – used for preparation and cleaning of parts; citrol – biodegradable cleaner; xylene – cleaning of paint products; and machining coolants – trimsol. In addition, chemicals used in plating area included sodium hydroxide, sulfuric acid, caustic soda, and powders and solutions for testing and maintaining plating bath quality. Products were stored on shelves and in storage areas free from any floor drains and approximately 60 feet from the closest sump.

Used oil storage was located outside the shipping and receiving doors on pallets. 55-gallon drums of used oil collected any spent oil from operations and were hauled off site by an authorized disposal company approximately once a year or longer since limited quantities were collected. The storage area did not present concerns for spills.

11. Are any hazardous wastes stored or discharged?

Representatives indicated that no hazardous wastes are stored or discharged from the facility.

FINDINGS AND CORRECTIVE ACTIONS

The following findings were identified during the inspection. Since the City of Sheridan does not currently have an EPA-approved Pretreatment program, the EPA is serving as the Control Authority in collaboration with the City until the City develops a Pretreatment program and submits to EPA for approval. Therefore, please provide responses to the following findings directly to EPA.

Finding 1 – L&H Industrial needs to apply for a zero-discharge control mechanism.

L&H Industrial is required to submit an application to the EPA. Based on observations during the inspection, and information received from the CWA Section 308 information request submittals, the facility's process is defined in the Metal Finishing Categorical Pretreatment Standards for New Sources found at 40 C.F.R. § 433.17 and is subject to the Standards, if a discharge of regulated wastewater were to occur. In addition, L&H Industrial is subject to the monitoring, reporting, notification, and recordkeeping requirements found in the Pretreatment Regulations found at 40 C.F.R. § 403.12, if a discharge were to occur.

Pretreatment Requirements

40 C.F.R. § 433.17
40 C.F.R. § 403.12

Corrective Action:

Complete and submit an application for a control mechanism submitted directly to EPA. See attached EPA Region 8 NDR Application.

Finding 2 – Ensure best management practices (BMPs) are in place for steam cleaning operations.
During inspection, the parts pressure washer steam cleaning machine was left running and unattended. Water was dripping from the unit for an undetermined amount of time resulting in water pooling and collecting in pressure washer sump (Photo 126).

Pretreatment Requirements
None – not permitted IU.

Recommendation:
EPA recommends procedures to ensure BMPs are in place for steam cleaning operations. Proper management of the pressure washing cleaning process could minimize wastewaters collected in the pressure washer sump and reduce overloading of the rinse sump and need to dispose of wastewater.

Finding 3 – Develop best management practices (BMPs) for tracking of wastes leaving site.
During inspection, facility representatives indicated spent trimsol coolant was collected in drums and transferred to Gillete for evaporation and disposal. However, the facility does not maintain records for tracking of transfer or ultimate disposal. Likewise, for metals recycling collected in dumpster and removed from site when full, manifests or records were not available.

Recommendation:
EPA recommends L&H Industrial establish a procedure to track quantities and frequency of all wastes leaving the facility including spent trimsol coolant transferred to L&H Gillette facility, and metals to be recycled. Manifests currently track liquids and solids removed from the facility by disposal company MSEC Inc. However, it would be beneficial to document the removal of spent coolant to show transfer of responsibility, and metals recycling to ensure proper disposal, and to maintain zero discharge certification.