STATEMENT OF BASIS FOR THE
KELLER TRANSPORT GROUNDWATER
REMEDIATION FACILITY
NPDES PERMIT MT-0030805
April 2018

PERMITTEE:	Keller Transport
FACILITY NAME AND ADDRESS:	Keller Transport, Inc. P.O. Box 30197 Billings, MT 59101
PERMIT NUMBER:	MT0030805
RESPONSIBLE OFFICIAL:	Debra Will, Manager Keller Transport, Inc. (800) 544-4613
FACILITY OPERATOR:	Jim Rolle, Director, Environmental Services West Central Environmental Consultants 1030 South Avenue West Missoula, MT 59801 (406) 549-8487
PERMIT TYPE:	Groundwater Remediation
TYPE OF TREATMENT:	Air Stripping and Activated Carbon Filtration
FACILITY LOCATION:	Milepost 5.2, MT Highway 35 Polson, MT 59860 Lake County, Montana Latitude 47.715850° N Longitude 114.045823° W T23N R19W, Section 33, NW¼
DISCHARGE LOCATION(S):	Latitude 47.715555° N Longitude 114.046944° W
RECEIVING WATER:	Flathead Lake

INTRODUCTION

The EPA directly implements the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) on Indian country lands within the State of Montana. This facility is located on the Flathead Reservation and thus is in Indian country as defined at 18 U.S.C. § 1151. The EPA has not approved the Confederated Salish and Kootenai Tribes (Tribes) to implement the CWA NPDES program in Indian country.

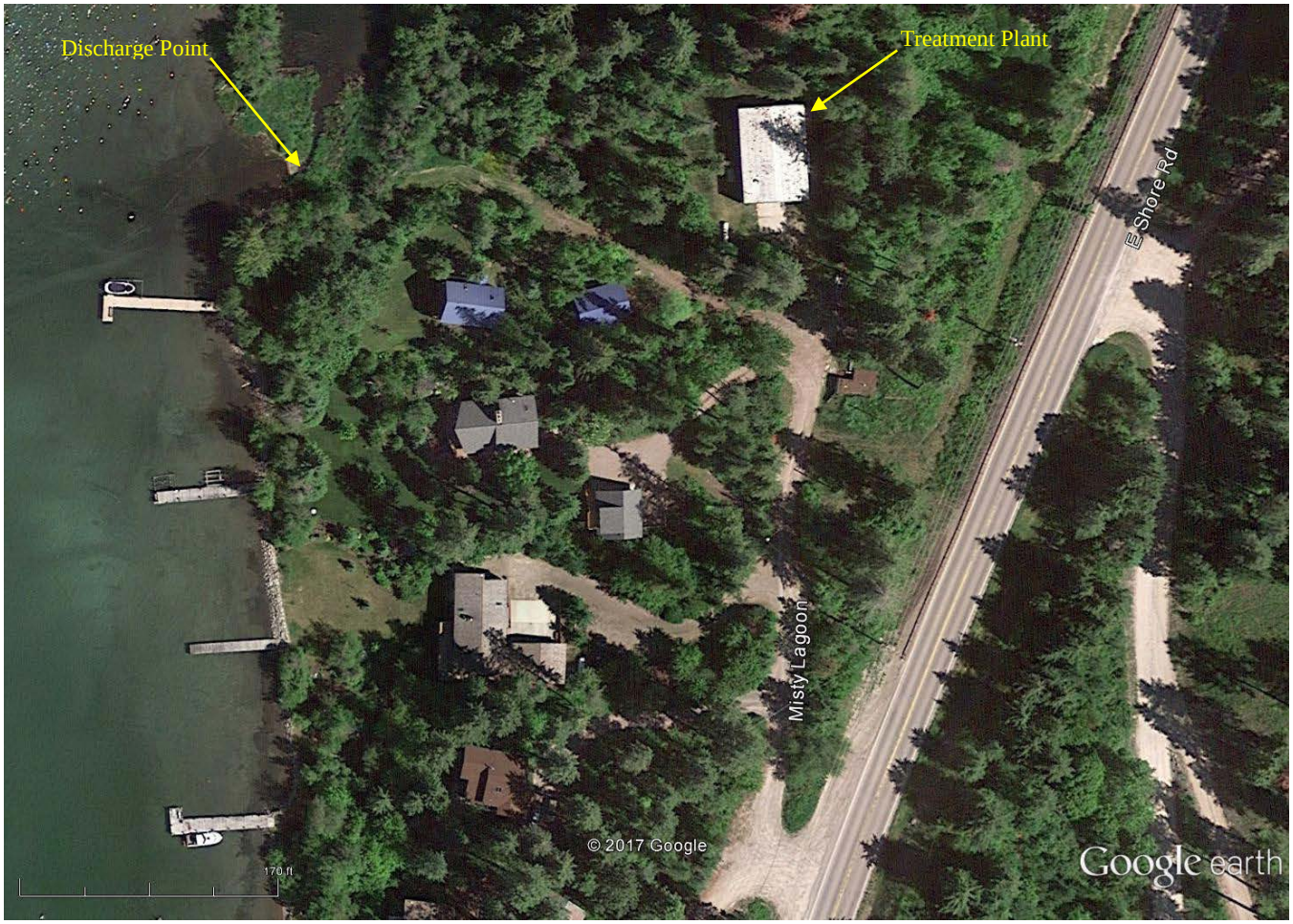
This statement of basis (SoB) is for the re-issuing of a NPDES permit to the Keller Transport, Inc. for the groundwater remediation system at East Bay Subdivision along Montana Highway 35, northeast of Polson, Montana. The permit establishes discharge limitations for any discharge of water from the groundwater remediation system. The SoB explains the nature of the discharges, and the EPA's decisions for limiting the pollutants in the wastewater, as well as the regulatory and technical basis for these decisions.

BACKGROUND INFORMATION

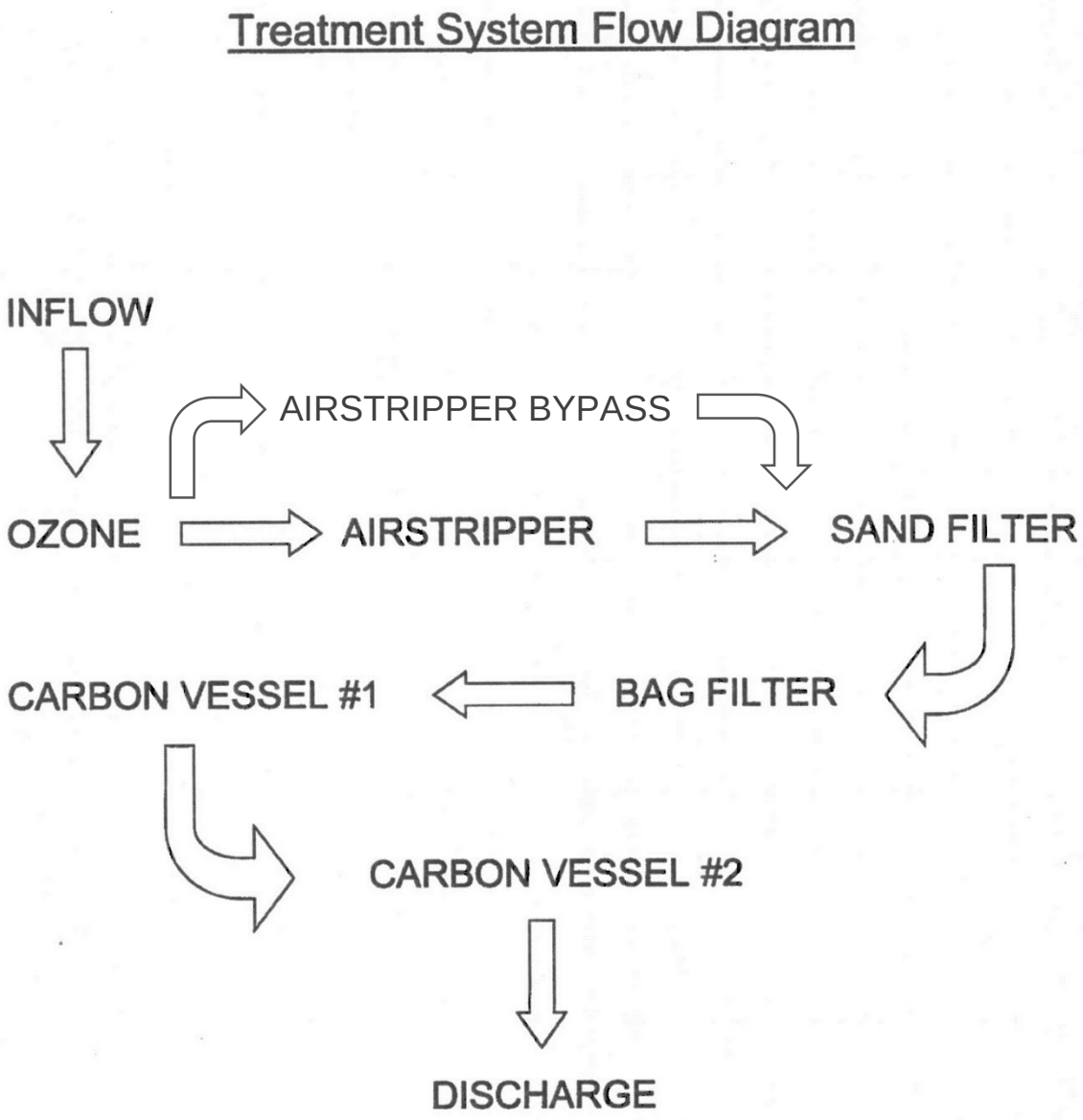
The Keller Transport Remediation Facility was created in response to a gasoline spill near Flathead Lake. On April 2, 2008, about 6,380 gallons of gasoline was spilled from a tank trailer due to a vehicle accident at mile 5.2 on Montana Highway 35, northeast of Polson, Montana. All the spilled gasoline had seeped into the ground before initial responders arrived on the scene. Immediate spill cleanup consisted of excavating gasoline saturated soils adjacent to and underneath Highway 35 at the spill site. On April 6, 2008, the initial remediation contractor detected organic vapors at two spring pools near the shoreline of Flathead Lake down-gradient of the spill site. On April 7, 2008, the remediation contractor set up a temporary treatment system utilizing carbon adsorption for the two spring pools and continuous treatment and discharge of water from the springs began the next day, April 8, 2008. A NPDES permit for the facility was issued in December 2008, authorizing discharge of the treated (remediated) ground water from the interim treatment plant to Flathead Lake.

In 2010, the current remediation contractor constructed a permanent water treatment facility for long-term operation to treat all hydrocarbon contaminated ground water at the site. The treatment facility consists of ozone treatment followed by air stripping cells with horizontal diffusers. The air-stripped water flow path is then filtered before passing through a 4,000-pound granular activated carbon cell followed by a 1,000-pound granular activated carbon container. The treated effluent then discharges to Flathead Lake. Operation of the treatment system showed the contaminated ground water could be successfully treated using just the activated carbon filters and the air stripping unit was turned off after the first year of operation to more economically treat the contaminated water and provide a less noisy environment for the neighborhood residents. The NPDES permit was modified in 2010 after the permanent treatment plant was operating, lowering the monitoring frequency for Benzene from weekly to monthly, due to the quality of the treated water being produced by the water treatment facility.

Aerial Image – Keller Transport Groundwater Remediation Facility



Flow Diagram – Keller Transport Groundwater Remediation Facility



RECEIVING WATERS

Water from the treatment system is discharged to East Bay of Flathead Lake, a water of the United States and a surface water of the Flathead Reservation. Flathead Lake is a large, natural, water body located in northwestern Montana and is the largest natural freshwater lake in the western United States. The lake is fed by the Flathead River main stem, which enters at the north end of the lake between the towns of Somers and Bigfork, Montana, and the Swan River, which enters the lake at the town of Bigfork at the northeast corner of the lake. Numerous small streams also enter the lake, mostly along the

east shore. The Flathead River leaves the lake at the southwest corner at the town of Polson, Montana. Though Flathead Lake is a natural water body, the lake level is controlled by Seli'š Ksanka Qlispe' (Salish Kootenai Dam, formerly Kerr Dam), a power-producing facility on the Flathead River approximately 4½ river miles downstream of U.S. Highway 93, which crosses the river where it exits Flathead Lake. Regulation of the outflow by the dam maintains the Lake's level between 2,883 and 2,893 feet above sea level.

Flathead Lake is bisected by the northern boundary of the Flathead Reservation at approximately 47.9° north latitude with all of Flathead Lake south of that latitude being within the reservation. Located about 12 miles south of the reservation boundary, East Bay of Flathead Lake lies entirely within the external boundary of the Flathead Reservation and is thus a surface water of the Reservation and comes under regulatory authority of the Tribes.

The Tribes have been granted treatment as a state (TAS) by the EPA and have adopted water quality standards (WQS), which are approved by the U.S. EPA. The most recent revision to the Tribes WQS was approved by the EPA on April 11, 2007. Surface waters are defined in the Tribes WQS, as "any waters on the surface of the Reservation, including but not limited to streams (permanent, intermittent, and ephemeral), lakes, ponds, wetlands, seeps and springs, reservoirs, and irrigation and drainage systems discharging into a stream, lake, pond, wetland reservoir, or other surface water. Treatment works used solely for treating, transporting, or impounding pollutants are not considered surface water." The Tribes WQS goes on to state "water quality segments specified in Section 1.3.5 through 1.3.12 include all elements referred to in the definition of surface water."

Section 1.3.5 *A-1 Classification,* of the Tribes WQS lists the portion of Flathead Lake within the Flathead Reservation as class A-1 water. Waters classified as A-1 must be maintained suitable for drinking, culinary and food processing purposes after conventional treatment and are also to be suitable for bathing, swimming and recreation, wildlife, growth and propagation of salmonid fishes and associated aquatic life and for agricultural and industrial purposes. Part h of this section also states "nor may concentrations of toxic or deleterious substances exceed Tribal Numeric Chart levels."

Narrative water quality requirements are listed in Section 1.3.13 *General Requirements and Limitations,* of the Tribes WQS. The narrative standards require reservation surface waters to be free from substances that are or may become injurious to public health, safety, welfare, or any of the existing beneficial uses, which may or will:

a) Settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines;
b) Create floating debris, scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials;
c) Produce odors, colors or other conditions that create a nuisance or render undesirable tastes to fish flesh or make fish inedible;
d) Create concentrations or combinations of materials that are toxic or harmful to human, animal, plant or aquatic life except for pesticide application; and,
e) Create conditions that produce undesirable aquatic life.

In addition to narrative water quality standards, the Tribes WQS contains charts listing aquatic life standards, human health standards for priority pollutants and non-priority pollutants and numeric surface water maximum contaminant levels. Of the compounds commonly found in gasoline, Benzene, Ethylbenzene and Toluene are listed in the Human Health Priority Pollutants chart and Ethylbenzene, Toluene and Xylenes are listed in the Numeric Surface Water Maximum Contaminant Level (MCL) chart. These compounds and their limits as listed in each chart are summarized in the following table:

Table 1 – Confederated Salish & Kootenai Tribes WQS

Parameter	Priority Pollutants Chart		Surface Water MCL Chart	
	Water+Organism (µg/l)	Organism Only (µg/l)	SDWA MCL (µg/l)	Potential Health Effects
Benzene	2.2	51	not listed	not listed
Ethylbenzene	530	2,100	700	liver, kidneys
Toluene	1,300	15,000	1,000	nervous system, liver, kidneys
Xylenes	not listed	not listed	10,000	nervous system

The Tribes do not have Benzene listed in the MCL chart. The EPA lists Benzene as a regulated drinking water contaminant with a Maximum Contaminant Level of 0.005 mg/l (5 µg/l) with anemia, decrease in blood platelets, and increased risk of cancer as potential health effects from ingestion of water.

Part V of the Tribes' Water Quality Standards contains provisions for surface water mixing zones, which are addressed in the Mixing Zone Implementation Procedures document, which was approved as part of the Tribes' WQS update on April 11, 2007. Part 2.b. of the Mixing Zone Implementation Procedures states in part "new or increased sources of discharge into lakes or open water bodies which have a mean detention time of greater than 20 days shall not be allowed a mixing zone." Data obtained from the University of Montana's Flathead Lake Biological Station during development of the previous permit shows a 3.4 year flushing or detention time for the lake. Therefore, the no mixing zone requirement from the previous permit is being continued in this permit and all discharge effluent limitations shall meet water quality standards at the point of discharge and effluent limitations derived in in the effluent limitations section below will be required for all effluent discharges to Flathead Lake from the treatment plant.

EFFLUENT CHARACTERIZATION

Effluent Monitoring Data

The permit renewal application provided data for pollutants believed to be present, as well as: biochemical oxygen demand, chemical oxygen demand, total organic carbon, ammonia, temperature, pH and actual flow. The EPA also reviewed the submitted data from discharge monitoring reports (DMR) for the period of January 31, 2009 to April 30, 2017, and a toxic pollutants screen report submitted with the permit application on November 21, 2012. A summary of data collected is given below in Tables 3 and 4. Complete data results are attached as Appendices A and B.

Table 3 – DMR Data Summary

Monitoring Period	pH min (s.u.) 6.5	pH max. (s.u.) 8.5	Benzene 30 Day Average 2.2 µg/L	Benzene Daily Max 5 µg/L	BTEX Daily Max 100 µg/L	TPH-Gasoline Daily Max 10 mg/L	Flow 30 Day Average (gpm)	Flow Daily Max (gpm)
Jan 2009	NR	NR	10.53	34	291.3	0.456	60	80
Apr 2009	7.86	9.33	0.29	0.5	5.05	0.05	60	80
Jul 2009	7.22	8.25	<0.5	<0.5	1.5	<0.05	30	80
Oct 2009	6.89	7.21	<0.5	<0.5	<1.5	<0.05	30	80
Jan 2010	5.46	8.90	<0.5	<0.5	<1.5	<0.02	30	80
Apr 2010	6.21	6.68	<0.5	<0.5	<1.5	<0.02	30	80
Jul 2010	7.01	7.70	0.5	0.5	1.5	0.02	45	80
Oct 2010	7.15	7.70	0.5	0.5	1.5	0.02	40	80
Jan 2011	6.23	6.98	<0.5	<0.5	<1.5	<0.02	40	80
Apr 2011	5.56	7.45	<0.5	<0.5	<1.5	<0.02	40	80
Jul 2011	6.35	6.91	<0.5	<0.5	<1.5	<0.02	40	80
Oct 2011	8.16	8.38	<0.5	<0.5	<1.5	<0.02	40	80
Jan 2012	7.64	7.96	<0.5	<0.5	<1.5	<0.02	40	80
Apr 2012	6.87	7.84	<0.5	<0.5	<1.5	<0.02	40	80
Jul 2012	6.21	8.29	<0.5	<0.5	<1.5	<0.02	40	80
Oct 2012	6.13	7.64	<0.5	<0.5	<1.5	<0.02	40	80
Jan 2013	6.65	7.61	<0.5	<0.5	<1.5	<0.02	40	80
Apr 2013	5.77	6.86	<0.5	<0.5	<1.5	<0.02	40	80
Jul 2013	6.56	7.70	<0.5	<0.5	<1.5	<0.02	40	80
Oct 2013	6.89	7.21	<0.5	<0.5	<1.5	<0.02	40	80
Jan 2014	7.16	7.51	<0.5	<0.5	<1.5	<0.02	40	80
Apr 2014	6.63	7.28	<0.5	<0.5	<1.5	<0.02	40	80
Jul 2014	7.05	7.34	<0.5	<0.5	<1.5	<0.02	40	80
Oct 2014	6.66	7.59	<0.5	<0.5	<1.5	<0.02	40	80
Jan 2015	7.35	7.46	<0.5	<0.5	<1.5	<0.02	40	80
Apr 2015	6.12	6.82	<0.5	<0.5	<1.5	<0.02	40	80
Jul 2015	6.27	6.75	0.13	0.52	1.3	0.755	40	80
Oct 2015	7.02	7.43	0	0	0	0.0047	40	80
Jan 2016	6.82	7.00	0	0	0	0.097	40	80
Apr 2016	7.21	7.39	0	0	0	0.0058	40	80
Jul 2016	7.39	7.74	<0.5	<0.5	<2.0	0.0046	40	80
Oct 2016	7.31	7.65	<0.5	<0.5	<2.0	<0.02	40	80
Jan 2017	7.36	7.50	<0.5	<0.5	<2.0	<0.02	40	80
Apr 2017	7.28	7.66	<0.5	<0.5	<2.0	<0.02	40	80
Average a/	6.37	7.93	0.73	2.01	16.97	0.25	39.5	80

Monitoring Period	pH min (s.u.) 6.5	pH max. (s.u.) 8.5	Benzene 30 Day Average 2.2 µg/L	Benzene Daily Max 5 µg/L	BTEX Daily Max 100 µg/L	TPH-Gasoline Daily Max 10 mg/L	Flow 30 Day Average (gpm)	Flow Daily Max (gpm)
# violations b/	10	3	1	1	1			

1. Average of all values in Appendix A, DMR data. Calculation of pH average explained in Appendix A.
2. Number of violations in summary data, complete listing of violations shown in Appendix A, DMR data.

Table 4 – Permit Application Data

Parameter	Units	Max Daily	Long Term Average	Intake	# Samples
Flow	gpm	65	47	47	91
Temperature (winter)	°C	9.90	6.43	6.91	84
Temperature (summer)	°C	13.89	8.77	8.50	111
Benzene	µg/L	<0.5	<0.5	32	189
Ethylbenzene	µg/L	<0.5	<0.5	13	189
Toluene	µg/L	<0.5	<0.5	13	189
Parameter	Units	Minimum	Maximum	Intake	# Samples
pH	S.U.	5.23	9.08	N/A	195

Reasonable Potential (RP) Evaluation

Quantitative RP Analysis

The NPDES regulations in 40 CFR § 122.44(d)(1)(i) – (iii) require permit writers to assess effluent with respect to the EPA-approved water quality standards to evaluate the impact of direct dischargers on downstream water quality. This assessment is used to determine permit limitations that are protective of water quality uses. The EPA considered it appropriate to assess effluent discharged from this facility and evaluate RP with respect to the Tribes WQS. As the Tribes do not have WQS for any of the organic pollutants, a RP analysis was done using the Tribes Human Health WQS.

Reasonable potential for pollutants in the discharge which have water quality standards, was evaluated for those parameters of concern which were measured and reported in the permit application or DMRs. The quantitative RP evaluation was performed on the effluent data from Appendix A using the Region 8 RP Tool, which assesses RP from effluent data with statistical procedures consistent with the EPA's Technical Support Document for Water Quality Based Toxics Control, March 1991. A confidence interval of 95% was used for all RP calculations and a value of one-half the detection limit was used for analytical results reported as below the detection limit. The RP analysis results are show in Table 5 below.

Table 5 – Reasonable Potential Evaluation

Parameter	Human Health Water Quality Standard		Maximum Reported Effluent Concentration	Reasonable Potential?	
	Water + Organism	Organism Only		Water + Organism	Organism Only
Benzene µg/L	2.2	51	Not Detected	No	No
Ethylbenzene µg/L	530	2,100	Not Detected	No	No
Toluene µg/L	1,300	15,000	0.64	No	No

The results of the quantitative evaluation did not identify any parameters as having RP to cause or contribute to exceedances of the water quality criteria. The projected water concentration of the parameters is below the Tribes' 2007 WQS. Therefore, the previous permit's effluent limitations for these parameters will be continued in this permit as protective of the Tribe's WQS.

Other Effluent Parameters

Monitoring for Total Purgeable Hydrocarbons (TPH) as gasoline range organics was included in the previous permit with an effluent limit of 10 mg/L. TPH was selected as an appropriate analysis based on the professional judgement of the EPA Region 8 permitting staff, because gasoline range organics cannot be detected using the standard oil and grease analysis. The TPH analysis was used in conjunction with a visual observation of the receiving water at the effluent discharge point looking for a petroleum product sheen on the water. During the January 2009 through April 2017 time-period, 80% of the effluent TPH analyses were below detection limit. Of the TPH analyses which had detections, none exceeded the effluent limit and one analysis exceeded 1 mg/L. The June 2015 TPH analysis level was 2.6 mg/L, just over one-quarter of the TPH effluent limit. The Confederated Salish and Kootenai Tribes do not have WQS for TPH, however the TPH as gasoline range organics effluent limit of 10 mg/L is being retained in this permit to be used in conjunction with the Tribes' narrative WQS for surface waters of the reservation, which state in part that all waters must be "free from substances, which may or will create floating debris, scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials." The visual observation monitoring requirement to detect any oil sheen is also being retained in this permit to meet the Tribes' narrative WQS.

The pH limitations in the previous permit were set at 6.5 – 8.5 based on the narrative pH standard for A – 1 classified waters. The Tribes' WQS have fresh water aquatic life pH standards of 6.5 – 9.0 for both acute and chronic exposure and human health criteria of 5.0 – 9.0 units for water plus organism consumption. The narrative standard for A – 1 classified waters states in part: "Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0." Monitoring during the previous permit showed 30 instances where the effluent pH was outside the limit range, 24 pH values were too low, 6 pH values were too high and the last pH value out of range occurred in mid-2015. Influent pH values for the months the effluent was out of the limit range were often also out of the effluent limit range and mostly within 0.5 pH unit of the effluent value as shown in Table 6, below. The influent pH values indicate the pH variations are likely a natural phenomenon due

to the porous nature and geologic makeup of the native bedrock, possibly influenced by construction activities during installation of the groundwater collection system.

The Tribes' WQS require the standard to be the more restrictive of the aquatic life or the human health standard. The aquatic life pH standard of 6.5 – 9.0 is the more restrictive but the A – 1 water classification requires no induced pH variation greater than 0.5 pH unit. To ensure the A – 1 water classification requirement is met, the pH effluent limit will remain at 6.5 – 8.5 for this permit.

Table 6 – Influent & Effluent pH Comparison

Date	pH < limit	pH > limit	Influent pH
Apr 2009	Not applicable	9.33	Not available[1]
Nov 2009	Not applicable	8.73	7.95
Dec 2009	Not applicable	9.08	8.78
Jan 2010	5.46	8.90	9.93
Feb 2010	5.23	Not applicable	5.56
Mar 2010	5.60	Not applicable	< 0.5 difference[2]
Apr 2010	6.21	Not applicable	< 0.5 difference[2]
Jan 2011	6.23	Not applicable	Also below limit[2]
Apr 2011	5.56	Not applicable	5.94
Jun 2011	6.24	Not applicable	6.55
Jul 2011	6.35	Not applicable	6.76
Aug 2011	6.18	Not applicable	6.41
May 2012	5.56	Not applicable	5.88
Jun 2012	6.34	Not applicable	5.53
Jul 2012	6.21	Not applicable	5.84
Oct 2012	6.13	Not applicable	6.38
Apr 2013	5.77	Not applicable	6.84
May 2013	5.68	Not applicable	6.73
Jun 2013	6.44	Not applicable	6.23
Aug 2013	Not applicable	8.73	Not available
Sep 2013	Not applicable	8.57	9.10
Nov 2013	6.42	Not applicable	6.41
Dec 2013	5.30	Not applicable	Not available
Aug 2014	6.32	Not applicable	6.42
Nov 2014	6.08	Not applicable	6.11
Apr 2015	6.12	Not applicable	6.15
May 2015	5.88	Not applicable	6.01
Jun 2015	6.28	Not applicable	Not available
Jul 2015	6.27	Not applicable	Not available

1. Influent pH values were provided in the DMR report cover sheet narrative but not all months had an influent value given.
2. Influent value compared to effluent value as given in the DMR report cover sheet.

EFFLUENT LIMITATIONS

The effluent limitations and the basis for the effluent limitations are summarized in Table 7 below. A discussion of the individual effluent limitations follows the table.

Table 7 – Effluent Limitations

Effluent Characteristic	Effluent Limitation		
	30-Day Average a/	Daily Maximum a/	Basis b/
Benzene, µg/L	2.2	5	WQS, PJ, PP
BTEX, µg/L	N/A	100	PJ, PP
Total Purgeable Hydrocarbons – Gasoline Range Organics, mg/L	N/A	10	PJ, PP
The effluent shall not: a) Settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines; b) create scum, a visible oil film or globules of grease or other floating material; c) produce odors, colors or other conditions that create a nuisance or render undesirable tastes to fish or make fish inedible; d) create concentrations or combinations of materials that are toxic or harmful to human, animal or plant life; e) create conditions that produce undesirable aquatic life.			WQS, PP
The pH of the discharge shall not be less than 6.5 or greater than 8.5 at any time.			WQS, PP

a/ See Definitions, Part 1.1., for definition of terms.

b/ WQS means water quality standards. PJ means the permit writer's professional judgement. PP means the previous permit.

Gasoline is a complex combination of hydrocarbon compounds, additives and blending agents. Finished gasoline can contain more than 150 different compounds. However, the volatile organic compounds Benzene, Toluene, Ethylbenzene and the mix of three Xylene isomers (BTEX) are commonly used as an effluent indicator parameter to represent the compounds found in gasoline. These compounds have similar physical and chemical characteristics, such as solubility in water and Henry's Law constant, which affect the treatability of the chemical. Generally, compounds with higher water solubility and lower Henry's Law constants are more difficult to remove from water with air stripping and carbon adsorption than non-soluble compounds. Of the four BTEX compounds, Benzene has the highest solubility in water. The four BTEX compounds also have some of the lowest Henry's Law constants of common gasoline components with naphthalene being the only compound that has a lower Henry's Law constant than the BTEX compounds.

The EPA's *Model NPDES Permit for Discharges Resulting From The Cleanup of Gasoline Released From Underground Storage Tanks* and *Fact Sheet, NPDES Permit Number: ID-G91-0000* recommends a total BTEX limit of 100 µg/l based on an air stripping removal efficiency of 99.5%. Set as an effluent limit, 100 µg/l total BTEX will ensure the removal of Toluene, Ethylbenzene and the Xylenes to levels below requirements in the Tribes' Priority Pollutants Chart and Surface Water MCL Chart. Based on the EPA's model permit and the fact sheet referenced above and the observed performance of the treatment

system during the previous permit period, the technology-based effluent limit for BTEX is being kept at 100 µg/l.

Benzene is one of the highest solubility in water and one of the lowest Henry's Law constants of the compounds in gasoline and also has a low carbon partition coefficient. Compared to other gasoline components, those properties make Benzene more difficult to remove from water using air stripping and more likely to break through carbon adsorption treatment when the carbon is reaching its adsorption capacity. Thus, Benzene is being used as an indicator compound. Satisfactory removal of Benzene from water is an acceptable indicator for removal of other gasoline constituents. Based on the Confederated Salish and Kootenai Tribes' water quality standards and the observed performance of the treatment system during the previous permit period, the effluent limit for Benzene is kept at 2.2 µg/l. This limitation will be as a 30-day average because the human health criteria for benzene are based on long term exposure. A maximum daily, technology-based effluent limitation of 5 ug/L will also be included in the permit.

In this permit the pH limit of the discharge remains between 6.5 and 8.5 standard units and is based on the Tribal water quality standards of the receiving water, which is an A – 1 classified water.

The permit will also require that the concentration of total purgeable hydrocarbons – gasoline range organics not exceed 10 mg/L and is based on the professional judgement of the EPA Region 8 Wastewater Unit. The effluent limitation on total purgeable hydrocarbons – gasoline range organics is being used instead of the usual effluent limitation on oil and grease because organic pollutants from gasoline will not be detected by the standard test for oil and grease. In accordance with Tribal water quality standards, the discharge shall not cause a visible oil sheen or film in Flathead Lake.

SELF-MONITORING REQUIREMENTS

The self-monitoring requirements are included in Part 1.3.2 of the permit. The discharge is to be monitored weekly for flow in gallons per minute, pH and visible oil sheen. If a visible sheen in the discharge or a sheen or floating film on Flathead Lake is observed, a grab sample of the discharge shall be collected promptly and analyzed for total purgeable hydrocarbons – gasoline range organics. The analysis for total purgeable hydrocarbons – gasoline range organics may be done using SW-846 Method 8015D or using an equivalent method. If no grab sample is taken during the reporting period because no visible sheen is observed, the permittee shall enter "No grab sample required this reporting period." or something similar on the appropriate line of the discharge monitoring report form. The grab sample for pH must be analyzed within 15 minutes to comply with the holding time specified in 40 CFR Part 136.

The monitoring for benzene and BTEX is to be done monthly. More frequent monitoring is not considered necessary because of the quality of the effluent being produced by the treatment facility as evidenced by monitoring results reported during the previous permit cycle (Appendix A). For purposes of this permit, BTEX is the sum of the benzene, ethylbenzene, toluene, and total xylene (all three isomers) present in the effluent. The concentrations of benzene, ethylbenzene, toluene, and total xylene must be added together to obtain a value for the concentration of BTEX. Total xylene is represented by three isomers (commonly referred to as meta-, para-, and ortho-xylene.) The concentration for the three isomers are added together to obtain a value for total xylene. The analytical methods in 40 CFR Part 136 will not provide adequate resolution to separate meta- and para-xylene. Therefore, meta- and para-

xylene will be represented by a single value. Total xylene is then computed by adding the concentration of ortho-xylene to the concentration representing both meta- and para-xylene.

REPORTING REQUIREMENTS

Reporting of Monitoring Results: With the effective date of this Permit, the Permittee must electronically report monthly discharge monitoring reports (DMR) using NetDMR. Electronic submissions by permittees must be submitted to the EPA Region 8 no later than the 28th of the month following the completed reporting period. The Permittee must sign and certify all electronic submissions in accordance with the signatory requirements of the Permit. NetDMR is accessed from the internet at https://netdmr.zendesk.com/home.

In addition, the Permittee must submit a copy of the DMR to the Confederated Salish and Kootenai Tribes. Currently, the Permittee may submit a copy to the Confederated Salish and Kootenai Tribes by one of three ways: 1. A paper copy may be mailed. 2. The email address for the Confederated Salish and Kootenai Tribes may be added to the electronic submittal through NetDMR, or 3. The Permittee may provide Confederated Salish and Kootenai Tribes viewing rights through NetDMR.

ENDANGERED SPECIES CONSIDERATIONS

The Endangered Species Act (ESA) of 1973 requires all Federal Agencies to ensure, in consultation with the U.S. Fish and Wildlife Service (USFWS), that any Federal action carried out by the Agency is not likely to jeopardize the continued existence of any endangered species or threatened species (listed species), or result in the adverse modification or destruction of habitat of such species that is designated by the FWS as critical (critical habitat). [16 U.S.C. § 1536(a)(2); 50 CFR. Part 402] When a Federal agency's action may affect a listed species, that agency is required to consult with the USFWS, depending upon the endangered or threatened species or designated critical habitat that may be affected by the action. [50 CFR. § 402.14(a)]

The USFWS website Information for Planning and Conservation (IPaC) was utilized to determine federally-listed endangered, threatened, proposed and candidate species. The IPaC Trust Resource Report findings are provided below for southern Flathead Lake and surrounding area.

Table 8 – Endangered and Threatened Species Listing

Species	Scientific Name	Status
Bull Trout	*Salvelinus confluentis*	T, FD
Yellow-billed cuckoo	*Coccyzus americanus*	T
Canada Lynx	*Lynx canadensis*	T
North American Wolverine	*Gulo luscus*	PT
Spalding's Catchfly	*Silene spaldingii*	T

Symbols/Acronyms:

PT = Proposed Threatened
T = Threatened
E = Endangered
FD = Final, Designated Critical Habitat

The EPA has determined that this action is not likely to adversely affect any of the listed species or their critical habitat. This action is renewal of an existing NPDES discharge permit. The permitted facility has been discharging treated groundwater to Flathead lake since 2009. Between April 2008 and the permanent treatment facility beginning operation, groundwater treated with a temporary system was discharged into Flathead Lake. Renewal of the NPDES discharge permit does not authorize any new discharge or changes to the volume or location of the current discharge to Flathead Lake and no new construction will occur at the site. The NPDES discharge permit renewal merely continues the EPA's regulatory authority over the facility, requiring the facility's discharge meet effluent limitations that are protective of water quality in Flathead Lake and placing monitoring, reporting and record-keeping requirements on the permittee to ensure they comply with the discharge permit effluent limitations.

Before going to public notice, a copy of the draft Permit and this Statement of Basis was sent to the USFWS requesting concurrence with the EPA's finding that reissuance of this NPDES Permit (MT-0030805) for the Keller Transport facility is Not Likely to Adversely Affect any of the species listed as threatened or endangered for Lake County by the USFWS under the Endangered Species Act nor their critical habitat. On September 14, 2017, the USFWS concurred with the EPA's conclusion that the described project will not adversely affect listed species

NATIONAL HISTORIC PRESERVATION ACT REQUIREMENTS

Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470(f) requires that federal agencies consider the effects of federal undertakings on historic properties. The EPA has evaluated its planned reissuance of the NPDES permit for this facility to assess this action's potential effects on any listed or eligible historic properties or cultural resources. The EPA does not anticipate any impacts on listed/eligible historic properties or cultural resources because this permit is a renewal and will not be associated with any new ground disturbance or changes to the volume or point of discharge. The EPA is supplied the draft Permit and Statement of Basis to the Confederated Salish and Kootenai Tribal Historical Office for their review and comment on this determination but did not receive any comments.

MISCELLANEOUS

On November 1, 2017, the EPA sent the Confederated Salish and Kootenai Tribes a request for certification of this permit as required by section 401 of the Clean Water Act. As of the end of the public notice period, the EPA has not received any response from the Tribes and their certification is considered waived.

The effective date of the permit and the permit expiration date will be determined at the time of issuance. The permit will be issued for a fixed period not to exceed five years.

Permit and Statement of Basis Written by David Rise, 406.457.5012.
Edited by David Rise.

ADDENDUM:

PUBLIC NOTICE AND RESPONSE TO COMMENTS

The permit and statement of basis were public noticed in the Missoulian on March 11, 2018. No comments were submitted to the EPA during the public notice period, which ended on April 11, 2018. Therefore, no changes were made to the statement of basis or Permit.