



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

January 16, 2015

404 Permit Application Number: NWW #2013-584-C09

Applicant/Authorized Agent: Yellowstone Pipe Line Company/Dan Nebel, Terracon Consultants, Inc.

Project Location: The nine crossing removal associated with this application are located in the North Fork Coeur d'Alene River unless otherwise indicated:

- River mile post 462.5 at T50N R3E Section 30 approximately 1.36 miles E of Scott Creek Road (Castle Rock vicinity). Note this pipeline is in the process of abandonment
- River mile post 464.7 at T50N R2E, section 23, approximately ½ mile downstream of Old River Road and USFS Road #400 (Steamboat Creek)
- River mile post 465.5 at T50N, R2E, section 26, approximately 0.3 mile west of Scott Creek Road
- River mile post 468.1 at T49N, R2E, section 4, approximately 1.4 miles north of the intersection of Little North Fork Road and Coeur d'Alene River Road
- River mile post 468.4 at T49N, R2E, section 4, approximately 1.5 miles north of Enaville
- River mile post 471.0 at T49N, R2E, section 18, approximately 2.1 miles north of Enaville
- River mile post 472.0 at T49N, R2E, section 19, approximately 1.6 miles north of Enaville
- River mile post 472.4 at T49N, R2E, section 19, approximately 1.2 miles north of Enaville
- River mile post 476 at T49N, R1E, section 36, in the Coeur d'Alene River near the City of Kingston

Receiving Water Body: North Fork Coeur d'Alene River and Coeur d'Alene River

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit, received on September 30, 2013 and supplemental documents dated July 15, 2014, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the

applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Project Description

Yellowstone Pipe Line Company (YPL) has revised their earlier two proposals for removal of abandon pipelines (June 10, 2013 and September 30, 2013) and now proposes to remove eight abandoned (or nearing abandonment) pipeline crossings in the North Fork Coeur d'Alene River and remove one abandoned crossing in the Coeur d'Alene River. The abandoned sections of pipe have been or will be purged and cleaned to ensure there is no residual product. Rules related to the Institutional Controls Program within the Bunker Hill Superfund site will be adhered to, where applicable.

The Army Corps permit NWW-2013-584-C09 issued on December 4, 2013 and certified by DEQ on November 25, 2013, authorized the removal of six abandoned pipelines using a vibratory method which would minimize turbidity in the river. After attempting this removal technique, YPL concluded that due to the weights attached to the pipeline this method would not work. No further work was accomplished under authorization of this permit.

In a letter to the agencies dated July 15, 2014 YPL indicated that they want to excavate the pipes in the flowing river without using the vibratory method, and without diversions or cofferdams, using two conventional sized excavators. They also increased the number of pipes to be excavated from six to nine. Each excavator, working from the center of the river toward opposite banks, would daylight the pipe by digging in the flowing water and side casting the excavated sediment in the flowing water downstream of the trench and onto the bank - when the bank is within reach of the excavator. The excavated piles located on the banks will have either silt fence or straw bales to filter or contain runoff from the dredged piles.

Typical digging reach of an excavator is approximately 30-35 feet and the length of excavation in water (at low flow) ranges from approximately 100 to 650 feet (alignment of pipe is not always perpendicular to the banks). Within the low flow wetted channel, the 10" diameter pipe is buried at a depth just at the riverbed surface to approximately 4.33 feet deep. Once exposed, the pipe will be lifted out of the river, suspended in slings attached to the two excavator buckets and moved out of the river by driving the excavators towards one bank. Excavators will then retrieve the side casted sediment from either the wetted channel or dry river bank and fill the pipeline trench. A best management practice for use on uplands will consist of an earthen plug left in the trench on each bank where the pipe is cut and capped. This plug is to prevent river water from backing up the trench and entering the area where the pipe is being cut. YPL proposes to restore the river banks by replacing riprap and salvaged vegetation.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier 1 Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier 2 Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The primary pollutant of concern for this project is sediment. There is also evidence of elevated lead, mercury and zinc concentrations in sediments of Beaver and Prichard Creeks which are two major tributaries to the North Fork Coeur d'Alene River located upstream of all nine crossings (Stream-Sediment Geochemistry in Mining-Impacted Streams: Prichard, Eagle, and Beaver Creeks, Northern Coeur d'Alene Mining District, Northern Idaho, USGS, 2004). Additionally, the Coeur d'Alene River is impaired due to cadmium, lead and zinc and therefore it is anticipated that sediments are highly contaminated with these pollutants. The contaminants of concern within the Bunker Hill Superfund site which includes the Coeur d'Alene River, also includes arsenic and mercury in addition to cadmium, lead and zinc. The Sediment Evaluation Framework for the Pacific Northwest (May, 2009) was consulted to determine if exceedance of WQS could be predicted given the available information about sediment metals concentrations, certification conditions, and the proposed project. It was determined that the pipeline removal on the Coeur d'Alene River could violate WQS and therefore, additional conditions were added for this crossing removal. Based on the available information and using best professional judgment, it was also determined that metals concentrations in the North Fork Coeur d'Alene River sediments are unlikely to cause an exceedance of WQS as a result of these pipeline removals at the proposed locations. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS,

including the water quality criteria applicable to sediment, arsenic, cadmium, lead, zinc and mercury.

Receiving Water Body Level of Protection

This project is located on Coeur d'Alene River and North Fork Coeur d'Alene River within the Upper Coeur d'Alene and Coeur d'Alene Lake assessment units. Subbasin assessment unit (AU) 17010301PN001_05 North Fork Coeur d'Alene River below Prichard Creek; and 17010303PN016_06 Coeur d'Alene River from the South Fork Coeur d'Alene River to Latour Creek. The North Fork Coeur d'Alene River has the following designated beneficial uses: cold water aquatic life, domestic water supply, primary contact recreation, and salmonid spawning. The Coeur d'Alene River is designated as having cold water aquatic life and primary contact recreation beneficial uses. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

The cold water aquatic life uses in the Coeur d'Alene River are not fully supported due to excess cadmium, lead, zinc and temperature. The North Fork Coeur d'Alene River's cold water aquatic life use is not fully supported due to flow regime alterations, physical substrate habitat alterations, excess sedimentation/siltation and temperature (2012 Integrated Report). The primary contact recreation beneficial use is fully supported in both rivers. As such, DEQ will provide Tier 1 protection only for the aquatic life use and Tier 2 protection, in addition to Tier 1, for the recreation beneficial use (IDAPA 58.01.02.051.01; 58.01.02.051.02) for both rivers.

Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier 1 review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of designated beneficial uses.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. Once a TMDL is developed, discharges of causative pollutants shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04). The North Fork Coeur d'Alene River has an EPA-approved TMDL for sediment. The Coeur d'Alene River is impaired due to cadmium, lead, zinc and temperature but does not yet have a TMDL for these pollutants.

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. Sediment loading to these rivers will be avoided by meeting the water quality standard for turbidity and the implementation of other sediment and erosion controls as required by this certification. Turbidity monitoring is required to ensure consistent and immediate compliance with the turbidity standards. Elutriate testing

completed and evaluated in advance of the project, will determine if metals (arsenic, cadmium, lead, zinc and mercury) in the sediments could cause exceedances of WQS. Bank restoration and revegetation is required as part of this certification to avoid further temperature degradation in both rivers. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria. These criteria are set at levels that protect and maintain designated and existing beneficial uses. In addition, the project will be consistent with the *Subbasin assessment and Total Maximum Daily Loads of the North Fork Coeur d'Alene River* (DEQ 2001).

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures that the level of water quality necessary to protect both designated and existing uses is maintained and protected in compliance with the Tier 1 provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier 2 Protection)

The Coeur d'Alene River and North Fork Coeur d'Alene River are considered high quality for recreational beneficial uses. As such, the water quality relevant to this use must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to recreational beneficial uses of the Coeur d'Alene River and North Fork Coeur d'Alene River (IDAPA 58.01.02.052.06). Pollutants relevant to recreational uses that are of concern for this project include the following: arsenic, zinc and mercury.

The certification requires elutriate testing in advance of the project to determine if the project has the potential to increase arsenic, zinc and mercury concentrations over background levels. If the testing shows the potential for increases, then additional BMPs must be used to avoid the increase. In this way, there is a reasonable assurance the project will not increase the concentration of pollutants relevant to recreational uses. As such, the project complies with IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.08.

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

General Conditions

- 1. Yellowstone Pipe Line shall notify the Coeur d'Alene DEQ Regional Office seven (7) calendar days prior to the start of in-water work FOR EACH CROSSING at 208-666-4605 (leaving a voicemail is acceptable). Include the field project manager's (or equivalent) phone numbers.**

2. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.
3. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances—including without limitation, changes in project activities, the characteristics of the receiving water bodies, or state WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
4. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
5. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project and any federal, state, or local government personnel.
6. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.
7. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
8. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow all the conditions described in this certification and the Section 404 permit.
9. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit *must* be obtained. More information can be found at <http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/Region+10+CGP+resources>.

River Bank and Access Points: Erosion and Sediment Control

1. Disturbed areas suitable for vegetation shall be planted utilizing vegetation initially removed from the site, supplemented with additional seeding, and with the addition of woody vegetation planted on the river banks in sufficient quantities when established, will minimize subsequent soil erosion and stabilize the banks. Woody species such as willow, dogwood and cottonwood are suitable.
2. Permanent erosion and sediment control measures on river banks and access locations shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.
3. Erosion control BMPs shall be monitored for short and long term effectiveness and supplemented if they are not effective.
4. All construction debris shall be properly disposed of so it cannot enter waters of the state and cause water quality degradation.

5. Sediment from disturbed areas that is tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. Placement of clean aggregate at all construction entrances or exists and other BMPs such as truck or wheel washes, if needed, must be used when earth-moving equipment will be leaving the site and traveling on paved surfaces.
6. Disturbance of wetlands and riparian vegetation shall be kept to a minimum.
7. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
8. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

Management of Hazardous or Deleterious Materials

1. To determine if in-water dredging, for the Coeur d'Alene River crossing only, will cause an increase of metals concentrations above background, the permittee shall prepare a sampling and analysis plan (SAP). The SAP shall include sampling and analysis of dissolved concentrations of river water, river water hardness (mg/L calcium carbonate), and standard elutriate testing of river sediments to be dredged for arsenic, cadmium, lead, zinc and mercury. The laboratory must use methods that can achieve a minimum level less than the Criterion Maximum Concentrations for these metals per the Idaho Water Quality Standards (IDAPA 58.01.02.210). Remember that some of these metals are hardness dependent and the WQS must be calculated using the measured hardness. Sample collection of river water and sediments shall occur on the same day, outside of any runoff events (generally below 2,000cfs measured at the USGS Cataldo gage). Samples shall be collected at the proposed Coeur d'Alene River pipeline removal location. **DEQ must review and approve** of the SAP in writing prior to sample collection. The standard elutriate test procedure is described in the Inland Testing Manual (EPA, 1998). Concentrations in µg/L from elutriate testing shall be mixed with 97 cfs (25% of the mean September discharge at Cataldo which is 390cfs) to determine if background concentrations or WQS, whichever is higher, will be met. If concentrations for any of the five metals exceed the higher of background concentrations or WQS, additional best management practices consisting of a diversion or cofferdam **shall be proposed to DEQ for review and approval**. The SAP and elutriate testing are not required if the permittee chooses to install a *diversion or cofferdam. This sample and analysis process shall be completed **at least three months** prior to the proposed start of work to allow for contingency planning if the elutriate tests determine that WQS will not be met. This crossing removal must also meet turbidity requirements described below.
2. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.

3. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
4. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to DEQ upon request.
5. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
6. Prior to use, equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state.
7. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
8. Any release that causes a sheen (of any size) in waters of the state must be reported *immediately* to the National Response Center at 1-800-424-8802 and DEQ by calling the Idaho State Communications Center at 1-800-632-8000.

Turbidity and In-Water Work

1. Complete requirements under paragraph 1 Management of Hazardous or Deleterious Materials section within the required timeframe.
2. Work shall be conducted during the low flow period of these rivers.
3. If authorized work results in heavy equipment working in wetlands, the equipment shall be placed on mats or suitably designed pads to prevent damage to wetlands.
4. Work in waters of the state shall be restricted to areas specified in the application.
5. Mechanized equipment shall be stored above the ordinary high water mark of the rivers.
6. Turbidity resulting from these proposed activities (all pipeline crossing removals and related work) must be controlled to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02.250.02.e). **Any violation of this standard must be reported to the DEQ regional office immediately at 208-666-4605 (voice mail is acceptable).**
7. To ensure compliance with Idaho's WQS, required monitoring steps shall include the following:

Choose and identify the following locations for each crossing:

 - a. Background location: A relatively undisturbed location unaffected by the construction activity, up-current from the permitted activity; and,
 - b. Compliance location: A location down-current from the permitted activity, within any visible plume, at the distance that corresponds to the size of the waterbody where work is taking place as listed on the table below:

Wetted Stream Width*	Compliance Distance
Up to 30 feet	50 feet
>30 feet to 100 feet	100 feet
>100 feet to 200 feet	200 feet
>200 feet	300 feet

*Channels that are split or braided shall be measured individually

8. Conduct Compliance Monitoring with a Turbidimeter
 - a. Measure turbidity at both background and compliance locations at the frequency directed in the tables below and record the date, time, location, and turbidity measurements in the daily log. The permittee must also record all controls and practices implemented at the start of the work. The manufacturer's instructions for turbidimeter operation shall be followed for turbidity monitoring. Only a hand held turbidimeter shall be used for monitoring to obtain immediate results.
 - b. Turbidity measurements must be representative of stream turbidity when the activity is being conducted. *Measurements cannot be taken during a cessation of activity.*
 - c. If the project causes turbidity levels to increase above 50 NTU over background, the permittee must stop work immediately, notify DEQ per above requirement, implement additional controls and practices, resume work, and monitor both points again. **Please note that stopping and starting the turbidity generating activity is not an adequate control; nor is implementing the same additional controls and practices over and over when they have failed to achieve compliance with the turbidity standard.** A description of the additional controls and the date, time, and location where they are implemented must be recorded in the daily log.
 - d. If the project causes turbidity levels to exceed 50 NTU over background and additional controls and practices fail to control turbidity, * diversions and/or cofferdams must be installed to meet water quality standards. Consult DEQ and other permitting agencies about this proposed change.

NOTE: If the applicant determines that turbidity cannot be measured due to safety concerns then work shall be rescheduled, modified, or workers protected, so turbidity can be monitored as directed by this certification.

Compliance Monitoring Schedule Using a Turbidimeter

Monitoring Interval	Exceedance in Turbidity	Action Required
First monitoring at ½ hour after in-water work begins	If 50 NTU over background	STOP work ; follow certification conditions
Second monitoring at ¼ hour after in-water work resumes	If 50 NTU over background	STOP work ; follow certification conditions
Third and subsequent monitoring at ¼ hour after in-water work resumes	If 50 NTU over background	STOP work ; install diversion or cofferdam barrier
Monitor every ½ hour of in-water work thereafter	If 0 to 24 NTU above background	None
Monitor every ½ hour of in-water work thereafter	If 25 to 49 NTU above background	STOP work after 8 hours every 24-hour period

9. Reporting—Copies of daily logs for turbidity monitoring must be made available to DEQ and other local, state and federal regulatory agencies upon request. The log must include:
- Background NTUs, compliance point NTUs, comparison of the points in NTUs, and location, time, and date for each reading.
 - A narrative discussing all exceedances, controls applied and their effectiveness, subsequent monitoring, work stoppages, and any other actions taken.

***Diversions and/or Cofferdams, for the purposes of this certification only, are defined as:**
Diversion – Diversion of the main flow of the river into a side channel or overflow channel to reduce the amount of flow across a nearby downstream subject pipeline crossing. The goal is not to dry the channel but to divert enough of the flow to meet turbidity standards as described in the above conditions. **Cofferdam** – The placement of a cofferdam only on the side of the river experiencing the deepest dredging. The cofferdam must divert sufficient flow around the dredging activity to meet turbidity standards as described in the above conditions.

Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the “Rules of Administrative Procedure before the Board of Environmental Quality” (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to June Bergquist, Coeur d’Alene Regional Office at 208-666-4605 or via email at june.bergquist@deq.idaho.gov.

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Daniel Redline
 Regional Administrator
 Coeur d’Alene Regional Office