



US Army Corps
Of Engineers
Walla Walla District
201 North Third Avenue
Walla Walla, WA 99362-1876

Public Notice:

Application for Permit

APPLICATION : NWW-2008-00579

WATERWAY: Bruno Creek Drainage, Pat Hughes Creek
Drainage and Mill Creek

APPLICANT: Thompson Creek Mining Company

DATE ISSUED: September 26, 2014

END DATE: October 26, 2014

30-Day Notice

Interested parties are hereby notified that this District has received an application for a Department of the Army permit for certain work in waters of the United States, including wetlands, as described below and shown on the attached drawings, entitled *Thompson Creek Mining Company Phase 8 Expansion*.

APPLICANT: Thompson Creek Mining Company (TCMC), P.O. Box 62, Clayton, Idaho 83227, telephone 208-838-2200, Mr. Bert Doughty

USACE PM CONTACT: Mr. Greg Martinez, Corps of Engineers, Boise Regulatory Field Office, 10095 W. Emerald Street, Boise, Idaho 83704-9754, telephone 208-345-2154, email greg.j.martinez@usace.army.mil

PURPOSE: Purpose of the project is to discharge over burden material removed from the expansion of the existing open pit into the existing Pat Hughes Creek waste rock storage facility; to discharge milled tailings into Bruno Creek drainage due to the expansion of the existing tailings impoundment and discharge rock and fill material into Mill Creek and Bruno Creek associated with project reclamation at end of project life.

WATERWAY: Bruno Creek, two unnamed tributaries to Bruno Creek, West Fork Bruno Creek, Mill Creek and Pat Hughes Creek and adjacent wetlands.

LOCATION: The proposed project would be located as follows: Bruno Creek, West Fork Bruno Creek and unnamed tributaries are within portions of Section 1, Township 11 North, Range 16 East and portions of Sections 25 and 36, Township 12 North, Range 16 East; Mill Creek is within portions of Section 1, Township 11 North, Range 16 East and Section 6, Township 11 North, range 17 East; Pat Hughes Creek is within Sections 11 and 14, Township 11 North, Range 16 East in Custer County, near Clayton, Idaho.

DRIVING DIRECTIONS: From Challis, Idaho drive south on State Highway 93 for two miles, turn southwest onto State Highway 75 travel approximately 25 miles turn north on Squaw Creek Road, travel roughly six miles turn off to Thompson Creek Mine, follow signage to mine office.

AUTHORITY: This permit will be issued or denied under the authority of Section 404 of the Clean Water Act (33 U.S.C. 1344). A Department of the Army permit is required for the discharge of dredged or fill material into waters of the United States, including wetlands.

WORK: Bruno Creek, West Fork Bruno and two unnamed tributaries to Bruno Creek discharge 520.2 cubic yards of tailings slurry and fill into 3,215 linear feet (0.29 acre) of stream channel including a small 0.026 acre in channel pond; and fill 0.21 acre of wetlands (0.201 acre forested; 0.007 acre emergent) to expand the tailings pond and reclaim at end of mine life;

Mill Creek discharge 511.8 cubic yards of fill material into 4,397 linear feet of stream channel (0.29 acre) and 2.93 acre of emergent wetlands to expand the tailings pond and reclaim at end of mine life;

Pat Hughes Creek discharge 457.6 cubic yards of rock fill material into 3,029 linear feet of stream channel (0.27 acre) and 0.26 acre of emergent wetlands to expand the existing rock waste dump; and

Squaw Creek discharge 5 cubic yards of dirt fill and fiber rolls along 100 linear feet of the left descending bank to repair bank damaged by erosion. This work is part of the mitigation the applicant is proposing to compensate for project impacts related to the expansion of the mine and reclamation activities associated with the tailing pond upon closure. Other mitigation proposed to compensate for project impacts include fencing off 10,000 linear feet of Squaw Creek and establishing a 5.8 acre wetland adjacent Squaw Creek. The fencing and construction of the wetland does not require Department of the Army approval as they occur in uplands or are activities that are not regulated under Section 404 of the Clean Water Act.

Cubic yards listed above are the amount that it would take to fill the existing channel and any adjacent wetlands. Total volume of material to be placed into the expanded waste rock storage facility and the expanded tailings dam is listed below in Additional Information.

ADDITIONAL INFORMATION: Thompson Creek Mine is a molybdenum mine that has been in operation since 1983. TCMC has submitted a modified plan of operation to the Bureau of Land Management (BLM) and the US Forest Service (USFS), Salmon Challis National Forest for an expansion of the mine. The BLM and USFS released the Draft Environmental Impact Statement on March 21, 2014 for a 90-day comment period which ended on June 18, 2014. **The applicants preferred plan is known as Alternative M2 (Phase 8), would result in the expansion of the existing waste rock storage facility located in the Pat Hughes drainage and the expansion of the existing tailing impoundment located in the Bruno Creek drainage.** Expansion of the ore body pit is located in uplands and will not impact waters of the United States. Under Alternative M2 molybdenum production would continue until 2025 instead of ending in 2016 with the completion of Phase 7 as is currently planned. The mine would produce an additional 131 million pounds (65,500 tons) of molybdenum and generate an additional 263.5 million tons of waste rock and roughly 100 million tons of tailings. The expansion of the mine (Phase 8) would impact 1,753 linear feet of stream channel (0.016 acre) in the Bruno Creek drainage and 0.17 acre of wetlands and 3,029 linear feet of stream channel (0.27 acre) in Pat Hughes Creek and 0.26 acre of wetlands for a total impact of 4,782 linear feet of stream channel (0.43 acre) and 0.43 acre of wetlands.

At end of phase 8, mine closure reclamation would result in additional impacts within the Bruno Creek drainage and in Mill Creek. In Bruno Creek, the reclamation plan shows that the closure cover crest fill on the tailings dam and impoundment would increase the fill elevation at the end of Phase 8 from 7742' to 7752'. This increase would fill an additional 1,462 linear feet of the Bruno Creek channel (0.13 acre) and impact 0.04 acre of wetlands. In Mill Creek reclamation of the tailings dam and impoundment would fill 4,397 linear feet of the stream and impact 2.93 acre of wetlands.

Alternative M2 to include the mine expansion and reclamation would impact a total of 10,641 linear feet of stream channel and 3.39 acres of adjacent wetlands of which the majority of the wetland impacts 2.93 acre occur in the Mill Creek drainage and is the result of activities to reclaim and close the tailings pond.

Under the current mine operation plan, mining would end after the phase 7 ore is depleted in 2016. Under this alternative (M1-No Action)) there would be no new impacts in the Pat Hughes Creek drainage or within the

Bruno Creek drainage associated with mining activities. Reclamation at mine closure would result in the same amount of impacts to Mill Creek as the M2 alternative (4,397 linear feet of channel and 2.93 acres of wetlands). In Bruno Creek placement of the cover crest fill would increase the height of the tailing pond from 7646' to 7656' filling an additional 500 linear feet (0.04 acre) within the Bruno Creek drainage.

The applicant also evaluated an alternative (M3) that would create a new waste rock storage facility in No Name Creek. Under this alternative the construction of a new waste rock storage facility would fill 5,606 linear feet of this intermittent stream and impact 0.053 acres of emergent wetlands. Impacts to the Pat Hughes drainage would be the same as Alternative M2. Impacts in the Bruno Creek drainage from the expansion of the tailing pond and within the Mill Creek drainage would be the same as Alternative M2. This alternative was not selected as it would result in greater impacts to the aquatic resource.

CONSTRUCTION PERIOD: Applicant proposes to start Phase 8 construction in 2015 and finish processing the ore in 2025 at end of mine life. Reclamation activities would take an additional 3 to 5 years. The permit would authorize construction and reclamation activities for a period of 15 years.

PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to Waters of the United States from activities involving discharges of dredged or fill material.

Avoidance: TCMC has avoided waters of the United States by not impacting any new drainage's for the storage of waste rock and tailings to include Basin Creek, No Name Creek, Lower Buckskin Creek and Upper Pat Hughes Creek. These drainages were eliminated from consideration because the additional waste rock from Alternative M2 could be accommodated by expanding the existing waste rock storage facilities and tailings impoundment.

Minimization: The applicant minimized impacts by retaining project impacts to within drainages already impacted mining activities rather than establishing new facilities. The existing waste rock storage facilities and tailing impoundment would be designed to accept all waste rock and tailings fill from the proposed Phase 8 expansion.

Compensatory Mitigation: To compensate for project losses (10,641 linear feet of stream channel and 3.39 acre of wetlands) from implementation of Alternative M2 and future reclamation impacts, the applicant would enhance wetlands and riparian habitat adjacent to the Squaw Creek by fencing both sides and removing live stock grazing from 10,000 linear feet of Squaw Creek; establishing a 5.8 acre wetland adjacent Squaw Creek and stabilizing a short 100 foot reach of eroded stream bank on Squaw Creek. Headwater stream channel impacts would be mitigated by enhancing 10,000 linear feet of Squaw Creek. The fenced corridor would vary from 100 to 450 feet wide, averaging 200 feet wide (46 acres). This riparian buffer area would be removed from grazing allowing this habitat to recover. However periodic grazing may be allowed in the future. One short 100 foot section of Squaw Creek would be treated by installing fiber rolls along the bank, placing approximately five cubic yards of dirt fill between the bank and the fiber roll and planting with native scrubs and grasses. The establishment of the 5.8 acre wetland adjacent to Squaw Creek would be constructed in an upland area and not require Department of the Army approve to implement. A complete description of the mitigation plan is described in the Thompson Creek Mine Wetland and Stream Mitigation Plan dated August 2014 (revised).

In accordance with the 1999 restoration plan, the reclaimed tailings pond would have a relatively flat surface allowing the Bruno Creek channel to be restored along the upslope side of the reclaimed tailings pond and discharge off the side through a concrete spillway such that the probable maximum flood would be safely managed on the surface without over topping the embankment. The stream would once safely routed around the tailing pond be reconnected with the lower segment. This restored channel reach on Bruno Creek is not part of the proposed mitigation plan presently proposed as it occurs too far in the future but would in time mitigate for channel impacts in the Bruno Creek drainage as a result of past, present and future mining impacts within this drainage. In contrast the reclaimed waste rock dumps in Buckskin Creek and Pat Hughes

Creek would be much steeper with a series of benches. The rock dumps would be shaped so that all water falling on the dumps would be directed to the sides where the water would be collected in constructed ditches and pumped to a lime treatment plant to neutralize the pH before being pumped to the mine pit which would be left to fill with water. Because of a slight chance for acid generation, the surface channels would not be re-established on top of the waste dumps in these drainages.

OTHER ENVIRONMENTAL DOCUMENTS and DA PERMITS ISSUED TO APPLICANT: Draft Environmental Impact Statement and Resource Management Plan Amendment for the Proposed Modification to the Thompson Creek Mine Plan of Operations, Section 404 Clean Water Act Permit Application, and Public Land Disposal Custer and Bannock Counties, Idaho issued in the Federal Register on March 21, 2014. A Department of the Army (DA) Nationwide permit was issued to TCMC on April 1, 2014 to install a barrier cutoff wall in the Pat Hughes drainage as part of the overall system to collect seepage water during Phase 7 from the waste rock storage facility for treatment before it has an opportunity to enter Thompson Creek. A nationwide permit was also issued on January 27, 2009 for the relocation of a haul road around the tailings impoundment and then modified on June 8, 2010 due to minor changes in the roadway alignment which resulted in less impact.

WATER QUALITY CERTIFICATION: This notice will also serve as public notice that the Idaho Department of Environmental Quality (IDEQ) is evaluating whether to certify that the discharge of dredge and/or fill material proposed for this project will not violate existing water quality standards. A Department of the Army permit will not be issued until water quality certification has been issued or waived by the IDEQ, as required by Section 401 of the Clean Water Act. If water quality certification is not issued, waived or denied within sixty (60) days of this public notice date, and an extension of this period is not requested by and granted to the IDEQ, certification will be considered waived. Additionally, within thirty (30) days of this Public Notice, any person may provide written comments to IDEQ request in writing that IDEQ provide them notice of their preliminary 401 Certification decision. Comments concerning Water Quality Certification for this project should be mailed to: Idaho Department of Environmental Quality, Idaho Falls Regional Office, 900 N. Skyline Road, Suite B, Idaho Falls, Idaho 83301.

AQUATIC RESOURCE DESCRIPTION: Pat Hughes Creek is a high gradient, small non fish bearing perennial stream with a drainage of approximately 2.4 square miles. The stream varies from 2 to 3 feet wide with steep side banks vegetated with upland plants or composed of talus rock. It is a first order tributary to Thompson Creek and has been distinctly affected by a large cross valley fill (waste rock storage facility) in much of the drainage. That portion of Pat Hughes Creek that remains unfilled (3/4 mile) is not a free flowing stream but part of the water management system. Water from the toe of the waste rock storage facility is either discharged to Thompson Creek or transmitted by pipeline to the Cherry Creek pump station for use at the mill.

Bruno Creek drains 6.3 square miles and is a second order tributary to Squaw Creek. Bruno Creek is roughly 6 miles in length from its headwaters to Squaw Creek. Bruno Creek has a relatively steep gradient within a narrow canyon that limits floodplain development. The construction of the tailings impoundment in 2 miles of the drainage has divided the creek into two separate reaches. The reach above the existing tailings impoundment is relatively undisturbed by mining activities. Both rainbow trout and cutthroat trout were present in 1980 within Bruno Creek prior to mine activities. Construction of the tailings impoundment eliminated the fish population in the middle of the drainage. Idaho Department of Fish and Game collected cutthroat trout in 2004 in the reach above the tailings impoundment, however, there were no fish identified above the tailings impoundment in sampling conducted by the Forest Service in 2013.

Mill Creek is a small perennial stream that in 1980 was a tributary to Bruno Creek. With the construction of the tailings impoundment the stream is now cut off from Bruno Creek with flow discharging to sediment ponds located at the toe of the tailings dam. Mill Creek does not presently support a fishery.

Squaw Creek drains 79.2 square miles and is a third order tributary to the Salmon River. Much of Squaw Creek is within a narrow valley which limits floodplain development; however it opens up in the lower reaches with some large patches of cottonwood trees. The lower portion of Squaw Creek provides habitat for many fish species to include both resident and anadromous salmonids and is the reach of Squaw Creek where mitigation to include fencing, creation of wetlands and minor bank work is proposed in the mitigation plan. Salmonid species currently documented include bull trout, Chinook salmon, steelhead, rainbow trout, west slope cutthroat trout and mountain whitefish.

ANTICIPATED IMPACTS ON AQUATIC ENVIRONMENT: Implementation of Alternative M2 (Phase 8) would impact 3,029 linear feet of stream channel (0.27 acre) and 0.26 acre of wetlands in the Pat Hughes drainage due to expansion of the waste rock storage facility; and impact 1753 linear feet of stream channel and 0.17 acre of wetlands in the Bruno Creek drainage (inundation) due to expansion of the tailings impoundment to elevation 7742'. These impacts would occur slowly from 2015 to 2025 as these facilities are enlarged. At end of mine life, reclamation plan shows that the closure cover crest fill on the tailings dam and impoundment would fill to elevation 7752'. Both Mill Creek and Bruno Creek would be impacted by reclamation activities associated with closure of the tailing pond. Approximately 4397 linear feet of stream channel (0.27 acre) and 2.93 acre of wetlands within the Mill Creek drainage and 1462 linear feet of channel in Bruno Creek (0.16 acre) and 0.04 acre of wetlands would be filled. Reclamation work in the Pat Hughes Creek Waste Rock Storage Facility would not impact any additional stream channel. As described in the Mitigation Plan roughly 100 linear feet of Squaw Creek would be impacted by mitigation activities. This would be a beneficial impact as it would repair a severely eroded reach of bank.

OTHER AUTHORIZATIONS: Work as proposed would require authorization under the Idaho Stream Protection Act administered by the Idaho Department of Water Resources. Expansion of the mine would also require the approval from the Idaho Department of Lands; Bureau of Land Management and US Forest Service, Salmon Challis National Forest.

CULTURAL RESOURCES: Coordination is currently being conducted with the office of the Idaho State Historic Preservation Officer to determine if this activity will affect a site that is listed on the National Register of Historic Places, or a site that may be eligible for listing on the Register. We are also coordinating with the appropriate Tribal entity or the Tribal Historic Preservation Offices for the Shoshone Bannock Tribe and the Nez Perce Tribe, to determine if there are any tribal historic or cultural interests within the project area.

TRIBAL TREATY RIGHTS and INTERESTS: Federal agencies acknowledge the federal trust responsibility arising from treaties, statues, executive orders and the historical relations between the United States and American Indian Tribes. The federal government has a unique trust relationship with federally recognized American Indian Tribes, including the Shoshone Bannock Tribe and Nez Perce Tribe. The Corps has a responsibility and obligation to consider and consult on potential effects to Tribal rights, uses and interests. The Corps further recognizes there may be need for additional and on-going consultation.

ENDANGERED SPECIES: The project is within the known or historic range of bull trout, Snake River Basin steelhead and Spring/summer Chinook salmon. Consultation is currently being conducted with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS/NOAA Fisheries Service) to determine if the activity will have any effect on species designated as endangered or threatened under the Endangered Species Act, or their critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844).

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS/NOAA Fisheries Service on all actions or proposed actions, permitted, funded or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH). EFH species are known to use the project area. The BLM is the lead federal agency for this project and has determined the described activity may affect and is likely to adversely

affect EFH. Consultation is currently being conducted with the NMFS/NOAA Fisheries service to determine the effect the activity will have on EFH.

ENVIRONMENTAL IMPACT STATEMENT: The BLM and USFS released the Draft Environmental Impact Statement on March 21, 2014 for a 90-day comment period which ended on June 18, 2014. The Final EIS is scheduled to be released in January 2015 with the BLM and USFS releasing their Record of Decision (ROD) in March 2015.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. This decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and in general, the needs and welfare of the people. In addition, our evaluation will include application of the EPA Guidelines (40 CFR 230) as required by Section 404(b) (1) of the Clean Water Act.

CONSIDERATION OF PUBLIC COMMENTS: The Corps of Engineers is soliciting comments from the general public; Federal, State and local agencies and officials, Tribal entities and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

PUBLIC HEARING: The BLM and USFS held two public meetings on the proposed mine expansion project. One meeting was held in Challis, Idaho on May 13, 2014 and a second meeting was held in Boise, Idaho on May 14, 2014.

Any person may request in writing, within the comment period specified in this notice, that a public hearing be held to consider this proposed activity. Requests for a public hearing shall state specific reasons for holding a public hearing.

COMMENT & REVIEW PERIOD: Interested parties are invited to provide comments on the proposed activity, which will become a part of the record and will be considered in the final decision.

Please mail all comments to:

U.S. Army Corps of Engineers
Walla Walla District
ATTN: Greg Martinez
Boise Regulatory Office
10095 W. Emerald Street
Boise, Idaho 83704-9754
greg.j.martinez@usace.army.mil

Comments should be received no later than the comment due date of October 26, 2014 as indicated on this notice, to receive consideration.

Greg Martinez
Project Manager
Walla Walla District

Enclosures:

Vicinity Map

Project Drawings

Thompson Creek Mine Wetland and Stream Mitigation Plan dated August 2014 (revised).