

**DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
RECOMMENDATION
ROBERT LARSON AND PAT DILLON
SMALL SCALE MINING PERMIT APPLICATION**

The Department of Environment and Natural Resources is recommending conditional approval of Robert Larson's and Pat Dillon's small scale mine permit application for a placer gold mining operation. The mine is located in SE1/4 Section 28; T3S-R4E, Custer County. The general location is approximately 1 mile west of Custer, South Dakota on US Forest Service land.

Robert Larson and Patrick Dillon will affect no more than 10 acres during the 15 to 20-year life of the operation. The mining operation will be conducted in two phases. During Phase 1, several small pits will be excavated, and the material mined will be processed with a wash plant located in the proposed affected area. The wash plant consists of a grizzly, trommel, sluice, screens, heavy particle collectors, a settling pond, and pumps. During Phase 2, a portion of French Creek that flows through the proposed mining area will be mined. Topsoil and overburden will be stripped and stockpiled prior to mining. Reclamation will be conducted concurrently with the mining operation, and the land will be reclaimed to grazing land.

REASONS FOR APPROVAL

The permit application addresses all of the requirements of SDCL 45-6B and ARSD 74:29. The application with the department's recommended conditions, below, provides the necessary safeguards to protect the environment during and following operations and ensures that the land is reclaimed to a beneficial use following operations.

RECOMMENDED CONDITIONS

Technical Revisions

1. The Board of Minerals and Environment (board), pursuant to ARSD 74:29:03:16, hereby authorizes the Department of Environment and Natural Resources (DENR) to approve proposed technical revisions for Robert Larson and Pat Dillon for:
 1. Modifying topsoil stripping plans and storage piles;
 2. Modifying or relocating access roads within the permit boundary;
 3. Modifying or relocating erosion, sedimentation, or drainage control structures;
 4. Modifying seeding mixtures or rates;
 5. Modifying plans and specifications for permitted facilities;
 6. Modifying water usage, storage, and sources as allowed by water rights permits;
 7. Modifying the size of area to be worked at any one time;
 8. Relocating or modifying chemical or petroleum storage areas;
 9. Modifying or moving portions of the permitted mine path;
 10. Modifying the mineral processing flow chart;
 11. Modifying the operating and reclamation plan to accommodate the approved US Forest Service operating plan within the constraints of ARSD 74:29:03;

12. Modifying quality control and quality assurance plans;
13. Modifying reservoir locations and dimensions; and
14. Modifying the timetable for the commencement of Phase 2 mining.

Technical revisions must comply with ARSD 74:29:03:03 and must be submitted to DENR in writing. DENR shall approve, disapprove, conditionally approve, or request additional information deemed necessary to approve technical revisions within thirty days of receipt.

General

1. The conditional approval of this permit application incorporates by reference those representations made by Robert Larson and Pat Dillon, as to plans, specifications, operations, environmental impacts, and reclamation as contained in the permit submitted April 2, 2012, with supplemental information submitted on May 30 and June 18 and 20, 2012. The representations contained in these documents are general conditions of this permit unless modified by a future technical revision, amendment, or permit, or modified by other conditions imposed by the board.
2. This permit and all rights under it are expressly conditioned on the truth of representations made by the applicant, Robert Larson and Pat Dillon, in the application and supporting documentation relating to the application. Should any material representation prove to be false, this permit and all rights under it may be canceled by the board.
3. This permit is conditioned upon compliance with all applicable laws and regulations.
4. The operation shall be conducted in compliance with all Custer County Zoning Requirements. All Custer County permits shall be obtained as necessary.
5. Robert Larson and Pat Dillon shall abide by the recommendations, proposed at the time of permit approval, by the South Dakota Archaeological Research Center, the South Dakota Department of Agriculture, the South Dakota Department of Game, Fish and Parks (GF&P), and the South Dakota Department of Health, except as modified or restated in these conditions.
6. Prior to the commencement of mining, a map showing the location of all buried water lines located in the permit boundary shall be submitted to the department. If any of the waterlines are damaged during mining and reclamation activities, operations shall cease immediately and the department, the US Forest Service and the city of Custer shall be notified.

Other Permits

1. Robert Larson and Pat Dillon shall obtain or update as necessary any storm water permits required for the project area.

US Forest Service Operating Plan

1. Robert Larson and Pat Dillon may not commence operations under this mine permit until the US Forest Service grants approval under an approved operating plan.
2. If US Forest Service approval for operations in the area substantially alters the operating or reclamation plans for the approved project, Robert Larson and Pat Dillon shall, depending on the nature and extent of the alterations, submit:
 - a. A technical revision, if the alterations fit the criteria for a technical revision under ARSD 74:29:03:16 and the categories of technical revisions listed above;
 - b. A mine permit amendment, if the alterations are minor modifications pursuant to ARSD 74:29:03:01; or
 - c. A new mine permit, if the alterations are major modifications pursuant to ARSD 74:29:03:02.

Water Quality

1. All discharges into French Creek shall be prevented unless a Surface Water Discharge Permit is obtained. Robert Larson and Pat Dillon shall notify the department within 24 hours of any discharge into French Creek.
2. In the event of any discharges into French Creek, the department reserves the right to require water quality sampling to assess impacts to the creek.
3. Surface water runoff from the site shall not cause South Dakota ground or surface water quality standards to be violated.
4. Robert Larson and Pat Dillon shall update the Storm Water Pollution Prevention Plan in accordance with the General Permit for Storm Water Discharges Associated with Industrial Activity.
5. The three foot berm between the mining operation and French Creek shall be in place prior to the commencement of Phase 1 mining.

Petroleum Spills

1. If any petroleum spills or leaks occur at the mine site, Robert Larson and Pat Dillon shall remove any petroleum contaminated soil and dispose of it in an approved disposal facility. Any spills shall be immediately reported to the department as well as the parties listed in Appendix C (Fuel Transport, Storage, and Handling) in the US Forest Service Operating Plan.

Sedimentation and Erosion Control

1. Erosion and sedimentation controls shall be in place and functional during all phases of clearing, earthwork, mining, and reclamation, and during the postclosure period in the permit area.
2. Robert Larson and Pat Dillon shall install rock check dams, diversion ditches, or other structures needed to minimize channelization and erosion from surface runoff. Surface water diversions and final reclamation drainage channels must meet the requirements of ARSD 74:29:07:09.
3. Interim sedimentation and erosion controls shall be used on disturbed land during clearing, mining, and reclamation until these areas are stabilized.
4. Robert Larson and Pat Dillon shall inspect, clean out, repair, or upgrade the sediment controls as necessary to ensure that the controls are adequately functioning and to maintain compliance with the surface water discharge permit and storm water permit as applicable.

Phase 2 Mining

1. A qualified fluvial geomorphologist shall develop final plans and specifications for the reconstructed portion of the French Creek channel that will be disturbed by mining and the French Creek diversion. Robert Larson and Pat Dillon shall submit the resume of the fluvial geomorphologist to the department for approval prior to the development of the plans and specifications. Final plans and specifications for the reconstructed portion for the French Creek channel and diversion shall be submitted to the department for approval at least 90 days prior to the commencement of Phase 2 activities.
2. The French Creek diversion shall comply with the requirements of ARSD 74:29:07:10.
3. Robert Larson and Pat Dillon shall obtain a US Army Corps of Engineers 404 permit prior to the commencement of Phase 2 mining activities.
4. An erosion and sedimentation control plan for areas in and downstream from the Phase 2 mining shall be submitted to the department for approval prior to the commencement of Phase 2 mining activities.
5. If necessary, Robert Larson and Pat Dillon shall obtain a Surface Water Discharge Permit from the department's Surface Water Quality Program for Phase 2 mining activities.
6. Robert Larson and Pat Dillon shall obtain an operating plan from the US Forest Service for Phase 2 mining operations prior to the commencement of Phase 2 activities.

Air Quality

1. Robert Larson and Pat Dillon shall effectively control fugitive dust and other air emissions during all phases of construction and operation. Dust control measures shall include the use of water trucks, dust filters on equipment, and revegetating disturbed areas as soon as practicable.
2. In accordance with ARSD 74:29:07:02(2), affected lands shall be cleared in small sections or increments as much as possible to reasonably match the needs of mine production and to reduce the amount of dust generated by the operation.

Wildlife Protection

1. Robert Larson and Pat Dillon shall promptly notify DENR and the Department of Game, Fish and Parks (GF&P) of species or critical habitat of species listed as state or federal, threatened or endangered that are located in the permit area.

Reclamation

1. Available topsoil or other material suitable for use as a plant growing medium shall be stripped and stockpiled separately from waste rock and/or overburden for use in reclamation. Topsoil stockpiles shall be clearly labeled and shall be stabilized to prevent wind and water erosion. Berms and/or other sediment and erosion control structures shall be installed on and around topsoil stockpiles to minimize erosional loss of soil resources. Topsoil shall not be used as backfill material.
2. Prior to final closure and bond release, Robert Larson and Pat Dillon shall maintain sufficient access to reclaimed areas to allow for any necessary reclamation maintenance. Roads not necessary for future use shall be reclaimed after the successful reclamation of all affected areas. If the US Forest Service requests that roads remain unreclaimed and agrees to be responsible for future maintenance, Robert Larson and Pat Dillon may request in writing to the board that the road be permitted to remain unreclaimed as stated in ARSD 74:29:07:12.
3. In accord with SDCL 45-6B-42, Robert Larson and Pat Dillon shall take precautions to limit access to highwall areas by fencing, posting warning signs, or other suitable means.

Reclamation Surety (under SDCL 45-6B)

1. Pursuant to SDCL 45-6B-21, Robert Larson and Pat Dillon shall submit a reclamation surety in the amount of two thousand five hundred dollars (\$2,500.00) prior to the issuance of Small Scale Mine Permit No. 478.

2. DENR will not release the bond, in whole or in part, until the US Forest Service has advised DENR that reclamation has been completed in a manner satisfactory to the Forest Service.

This recommendation is being mailed to you pursuant to ARSD 74:29:01:15. Petitions to intervene and become party to the proceedings pursuant to ARSD 74:29:01:09 must be filed with the Department of Environment and Natural Resources no later than September 12, 2012. The department will issue the permit on this date if no petitions to intervene are received.

Persons desiring further information concerning the permit application may contact Eric Holm of the Minerals and Mining Program, Joe Foss Building, 523 East Capitol, Pierre, South Dakota 57501 - (605) 773-4201.

Steven M. Pirner
Secretary
Department of Environment and Natural Resources

September 5, 2012