

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
RECOMMENDATION
TERESA FOX
SMALL SCALE MINE PERMIT APPLICATION

The Department of Environment and Natural Resources is recommending conditional approval of Teresa Fox's small scale mine permit application for a placer gold mining operation. The mine is located in S1/2 SW1/4 Section 23; T5N R1E, Lawrence County. The general location is approximately 9 miles southwest of Spearfish, South Dakota on US Forest Service land.

Ms. Fox plans to affect a maximum of 5 acres and remove a maximum of 11,000 tons of material annually during the 6 year life of the project. Placer gravels will be mined, hauled, and fed to a portable trommel-slucice with a rubber track backhoe/excavator. Water needed in the process will be hauled to the site. Discharged gravels from the trommel-slucice will be stockpiled within designated disturbed areas and mostly used to backfill pits. Any remaining stockpiles will be regraded and reclaimed in place. Topsoil and overburden will be stripped, stockpiled, and placed on the backfilled pits. Reclamation will be conducted concurrently with the mining operation. Operations will begin following approval of the mine permit application and the issuance of an operating plan by the US Forest Service and will be completed by November 15, 2017. The proposed postmine land use is forest grassland.

REASONS FOR APPROVAL

The permit application addressed all of the requirements of SDCL 45-6B and ARSD 74:29. It should be noted that the proposed mining area is within the Spearfish Canyon Watershed which was placed on the Preliminary List of Special, Exceptional, Critical, or Unique Lands on March 5, 1991. However, the department has determined that any impacts caused by the operation will have only minimal, short term effects which can be successfully mitigated. 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 Teresa Fox for:
 1. Modifying topsoil stripping plans and storage piles;
 2. Modifying or relocating access roads within the permit boundary;
 3. Modifying seeding mixtures or rates with approval of the US Forest Service;
 4. Modifying water usage or storage within the recirculating system;
 5. Modifying the size of area to be worked at any one time;

6. Modifying or relocation of erosion, sedimentation, or drainage control;
7. Modifying the operating and reclamation plan to accommodate the approved US Forest Service operating plan within the constraints of ARSD 74:29:03;
8. Adding contiguous affected land within the permit area when the total of such additions does not exceed 20 percent of the originally permitted affected land area.
9. Modifying equipment list as conditions change in the pit.

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 revision within thirty days of receipt.

General

1. The conditional approval of this permit application incorporates by reference those representation made by Teresa Fox, as to plans, specifications, operations, environmental impacts, and reclamation as contained in the permit submitted May 16, 2011, with supplemental information submitted on March 28, April 25, May 14, June 11, and July 5, 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, Teresa Fox, 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 Lawrence County Zoning Requirements.
5. Teresa Fox shall abide by the recommendations, proposed at the time of permit approval, by the South Dakota Department of Education and Cultural Affairs, 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.

Other Permits

1. Teresa Fox shall obtain or update, as necessary, any surface water discharge or storm water permits required for the project area.

US Forest Service Operating Plan

1. Teresa Fox may not commence operations under this mine permit until the US Forest Service grants approval under the approved operating plan.

2. If US Forest Service approval for operations in the area substantially alters the operating or reclamation plans for approved project, Teresa Fox 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 to ARSD 74:29:03:02.

Water Quality

1. All discharges to Iron Creek must be prevented unless a Surface Water Discharge Permit is obtained.
2. Teresa Fox shall notify the department of any discharges to Iron Creek within 24 hours of the discharge.
3. A 25 foot operational buffer must be maintained between the mining operation and Iron Creek at all times.
4. Surface water runoff from the site shall not cause South Dakota ground or surface water quality standards to be violated.
5. Teresa Fox shall update the Storm Water Pollution Prevention Plan in accordance with the General Permit for Storm Water Discharges Associated with Industrial Activities.
6. In the event of any discharges to the creek, the department reserves the right to require water quality sampling to assess impacts to the creek.

Petroleum Spills and Clean Up

1. Should a petroleum product spill or leak occur on the site, Teresa Fox shall remove the contaminated soil as soon as possible and dispose of it at an approved disposal site.
2. Teresa Fox shall comply with the requirements of SDCL 34A-12.

Sedimentation and Erosion Control

1. Erosion and sedimentation controls shall be in place and functional during all phases of clearing, earthwork, mining, reclamation, and during postclosure period in the permit area, in accordance with the General Permit for Storm Water Discharges Associated with Industrial Activities.

2. Teresa Fox 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.

Teresa Fox 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 discharge permit as applicable.

Air Quality

1. Teresa Fox 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 74:29:02:02(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. Teresa Fox shall promptly notify DENR and the Department of Game, Fish and Parks (GF&P) of species or critical habitat species listed as state or federal, threatened or endangered that area located in the permit area.

Reclamation

1. Mining activity shall be confined to one mine pit at any one time. Any previously mined pit shall be in the process of reclamation (backfilling, grading, topsoil placement, and seeding) as the active pit is being mined. The mine operation is limited to a maximum disturbance of one acre at any one time, which includes pits, stockpiles, processing areas, and access roads.
2. 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.
3. Prior to final closure and bond release Teresa Fox shall maintain sufficient access to reclaimed areas to allow for any necessary reclamation maintenance. Roads not necessary for future use shall be reclaimed after successful reclamation of all affected

areas. If the US Forest Service requests that roads remain unreclaimed and agrees to be responsible for future maintenance, Teresa Fox may request in writing to the board that the road be permitted to remain unreclaimed as stated in ARSD 74:29:07:12.

4. In accord with SDCL 45-6B-42, Teresa Fox, shall take precautions to limit access to highwall areas by fencing, posting warning signs, or other suitable means.

Reclamation Surety (under 45-6B)

1. Pursuant to SDCL 45-6B-21, Teresa Fox shall submit, to the department, 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. 477.
2. DENR shall 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 August 8, 2012. A hearing on the mine permit application will be held before the Board of Minerals and Environment on August 15 and 16, 2012. In accordance with ARSD 74:29:10:25, the board will determine, during the hearing, whether the lands in the proposed mine area are finally designated as special, exceptional, critical, or unique. In its determination, the board may find the land is unsuitable for mining, restrict the extent of land to be affected, impose limitations on the type of activity allowed, restrict the amount of time the land may be affected, or impose limitations that minimize visual impacts and reduce conflicts with scenic and recreational uses. Also, the board will take action on the permit application, either to approve, conditionally approve, or deny accordingly.

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

Steven M. Pirner
Secretary
Department of Environment and Natural Resources

August 1, 2012