

**Wharf Resources**  
**Permit 464 Amendment Conditions**  
**American Eagle Pushback Expansion**

General

1. The conditional approval of this permit amendment incorporates by reference those representations made by Wharf Resources, as to plans and specifications, monitoring, and reclamation as contained in the permit amendment submitted on July 22, 2009 with supplemental information submitted on December 18, 2009, and January 20, and 26, 2010. The representations contained in the permit amendment are general conditions unless modified by the following conditions, modified by future technical revisions, amendments or permits, or modified by other conditions imposed by the Board of Minerals and Environment.
2. This permit amendment and all rights under it are expressly conditioned on the truth of representations made by the applicant, Wharf Resources, its officers, and employees, in the application and supporting documentation relating to the application. Should any material representation prove to be false, this permit amendment and all rights under it may be cancelled by the board.
3. This permit amendment is conditioned upon compliance with all applicable laws and regulations.
4. The operation shall be conducted in compliance with all Lawrence County zoning requirements and conditional use permit conditions.
5. All monitoring systems described in the permit amendment applications or as modified by the department or the board shall be implemented. Changes to monitoring systems must be approved by the department through technical revisions.

Other Permits

1. Wharf shall obtain, as necessary, any additional surface water discharge or ground water discharge permits for the American Eagle pushback amendment area. This also includes appropriate modifications to the surface water discharge permit, and if required, new surface water discharge and storm water permits.
2. These conditions do not change the requirements of other existing permits, including Ground Water Discharge Permits and Surface Water Discharge Permits.

## Acid Rock Drainage Prevention and Management

1. During mining of the American Eagle Pit, Wharf shall abide by its Acid Rock Management Plan and the conditions of the Technical Revision approved September 30, 2002, regarding the acid rock drainage prevention plan for the Trojan Pit. The requirements of Condition Nos. 1 and 2 of the September 30, 2002 technical revision, regarding the lower Deadwood Formation, shall also apply to the lower Deadwood Formation in the American Eagle Pit.
2. If the results of additional exploration drilling reveal an increased acid generation potential, or if unanticipated conditions are encountered during the course of mining (such as greater than anticipated sulfide mineralization), the department reserves the right to reopen and modify the permit amendment and increase the reclamation bond as necessary to prevent or mitigate potential adverse conditions.
3. The department may require analysis of rock or ore whenever mining encounters an unanticipated geochemical condition which has the potential to be a source of water pollution, such as greater than anticipated sulfide mineralization. Analysis may consist of static (acid-base accounting), paste pH, NAG pH, and kinetic (humidity cell, weathering cells, or column leach) tests or other appropriate tests.

Based on the results of the rock analysis, the department may require Wharf to assess potential water quality related impacts that may occur as a result of using the rock as pit backfill or elsewhere on the mine property. In assessing the potential water quality impacts, the department may require Wharf to conduct a pathway and fate analysis of the resulting contaminants. Based on the assessment and the pathway and fate analysis, the department reserves the right to apply additional, site-specific rock handling conditions. Special rock handling practices may include, but not necessarily be limited to, isolating acid producing and/or metal leaching rock and disposing of it separately, capping problematic rock, or disposing of it using special blending techniques.

## Water Quality

1. Leachate discharge or surface water runoff from the American Eagle pushback amendment area shall not cause South Dakota Ground Water Discharge Permit requirements, South Dakota Surface Water Discharge Permit requirements, or ground or surface water standards, as appropriate, to be violated.
2. The department reserves the right to modify the water quality monitoring plan if water quality monitoring results indicate a modification is warranted. Modifications may include establishing additional neutralization sampling requirements, adding parameters, changing sampling frequency, changing sampling schedules, or modifying Wharf's Ground Water Discharge Plan or Surface Water Discharge Permit.

### Sedimentation and Erosion Control

1. Erosion and sedimentation controls shall be in place and functional during all phases of clearing, earthwork, construction, mining, and reclamation in the American Eagle pushback amendment area, in accordance with Wharf's Surface Water Discharge Permit.
2. Wharf shall install rock check dams, diversion ditches, or other adequate 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, construction, mining, and reclamation until these areas are stabilized, in accordance with any General Storm Water Construction Permit issued to Wharf.
4. Wharf shall submit an updated sediment map for the American Eagle pushback amendment area showing sediment control locations and type prior to any land disturbance in the permit area.

### Air Quality and Noise

1. Wharf shall effectively control fugitive dust and other air emissions during all phases of clearing, earthwork, construction, mining, and reclamation in the American Eagle pushback amendment area. Dust control measures shall include the use of water trucks, dust suppressants, 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 to reasonably match the needs of mine production and to reduce the amount of dust generated by the operation.
3. Wharf shall notify the department within five working days of written complaints from landowners adjacent to the operation concerning dust, noise, and blasting. Wharf shall submit to the department a copy of any reports or mitigation plans submitted to Lawrence County regarding the complaints. The department, on finding that a complaint is based in fact on potential permit violations, may require Wharf to develop a mitigation plan to correct the potential violation. The completion date for the mitigation plan will be set at the time of the department's request.

### Wildlife Protection

1. Sensitive plant surveys have identified species listed on the South Dakota Natural Heritage database in the proposed mine area. Wharf shall consider the location of these plant species when locating haul roads and equipment or material storage areas. Wharf

shall make every effort to avoid these areas where sensitive plant species are identified. Wharf shall promptly notify the Department of Game, Fish and Parks of species or critical habitat of species listed as state or federal rare, threatened, or endangered that are located in, or close to, the American Eagle pushback amendment area.

2. Wharf shall only clear timber in mine areas when birds are not nesting or eggs are not present in the nests. In the Black Hills, nesting activities start in March and are typically complete by August.
3. Wharf shall take appropriate measures to ensure American Dipper habitat along Cleopatra Creek is not adversely impacted by sedimentation.

### Utilities

1. If a change is required in the relocation of utilities within the proposed mining area, Wharf shall submit plans to the department for approval prior to development of the new route.

### Spill Contingency

1. All affected land under the American Eagle pushback permit amendment shall be included under Wharf's spill contingency plan. By July 1, 2010, Wharf shall submit for department approval an updated spill contingency plan covering the American Eagle pushback amendment area.

### Reclamation

1. By July 1, 2010, Wharf shall submit an update of the Reclamation Performance Criteria to include the American Eagle pushback amendment area.
2. All available topsoil or other material suitable for use as a plant growing medium shall be stripped and stockpiled for use in reclamation. This includes salvage of topsoil from reclaimed areas that will be redisturbed. Topsoil stockpiles shall be clearly labeled and shall be stabilized to prevent wind and water erosion. Topsoil shall not be used as backfill material.
3. During final reclamation, a minimum of 4 to 6 inches of topsoil shall be applied to all reclaimed areas. If the 4 to 6 inch requirement cannot be met with the stockpiled topsoil, Wharf shall manufacture additional topsoil by amending other soil material around the mine site until there is adequate material to meet the 4 to 6 inch requirement.
4. As much as practicable, to utilize the soil feed bank, Wharf shall concurrently remove topsoil from newly disturbed areas and apply it to areas requiring topsoil cover. Special

attention should be given to topsoil from areas containing aspen to take advantage of the species characteristic to regenerate from roots after disturbance.

5. Seed bank found in topsoil has the ability to spread undesirable seeds into areas of low weed infestations. Wharf shall consider herbicide treatment of weed infestations in areas of topsoil removal, as necessary.
6. As much as practicable, Wharf shall transplant trees and shrubs from areas proposed to be disturbed to areas undergoing reclamation.
7. Prior to final closure and bond release, Wharf 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.
8. Wharf shall dispose of mine rock and spent ore in mined out areas to the fullest extent practicable to maximize the amount of material that is available for grading, backfilling, and topographic reconstruction of the open pits following mining.
9. If deemed necessary by the department, Wharf shall conduct a geotechnical stability analysis of the exposed American Eagle highwalls prior to final reclamation. If the highwalls are found to be unstable, additional backfilling may be required to buttress unstable walls.
10. In accord with SDCL 45-6B-42, Wharf shall take precautions to limit access to highwall areas by fencing, posting warning signs, and other suitable means. On completion of mining, highwall areas shall be adequately fenced or otherwise protected to prevent hazards to the public.
11. Pursuant to ARSD 74:29:07:17, all underground mine openings intercepted during the mining phase shall be sealed or otherwise permanently guarded against unauthorized entry during reclamation. If bats are found in underground workings, Wharf shall provide bat entrances.
12. If runoff into reclaimed pits causes erosion or permanent ponding, the department may require Wharf to develop mitigation plans to correct the runoff problem. Mitigation may include construction of additional sedimentation controls and the installation of additional diversion or runoff ditches. The department reserves the right to reopen and modify the permit amendment and increase the reclamation bond as necessary to prevent or mitigate potential adverse runoff conditions.

#### Reclamation Financial Assurance

1. Wharf Resources shall submit additional reclamation financial assurance in the amount of sixty-two thousand six hundred dollars (\$62,600) prior to the commencement of mining

in the American Eagle pushback amendment area. The reclamation bond for the entire mine site will be recalculated during the 2011 reclamation bond update. If necessary, Wharf shall submit any additional reclamation surety bond after the 2011 update is completed.

2. Pursuant to SDCL 45-6B-27, the department and the board reserve the right to adjust the reclamation bond amount for the American Eagle pushback amendment area for inflation, for unanticipated conditions, for additional nitrate loading, and for other modifications. The reclamation bond may also be adjusted downwards as reclamation work is completed, or as water treatment reduces the nitrate load.

#### Postclosure

1. All affected land within the American Eagle pushback amendment area shall be included in the postclosure plan.