

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Water Protection Bureau

Name of Project: Westmoreland Savage Corporation, Savage Mine

Location of Project: Savage Mine located approximately 5 miles West of Savage, MT;

Outfall Locations: 001 - 47° 28' 21" N latitude, 104° 25' 34" W longitude
 002 - 47° 27' 30" N latitude, 104° 26' 45" W longitude
 003 - 47° 27' 28" N latitude, 104° 26' 45" W longitude
 004 - 47° 28' 19" N latitude, 104° 25' 32" W longitude
 005 - 47° 27' 45" N latitude, 104° 26' 45" W longitude

County: Richland County

Description of Project: This is a reissuance of MPDES permit MT0023604 for Westmoreland Savage Corporation which discharges treated mine drainage from an approximately 1280 acre lignite coal mine to Peabody Coulee and an unnamed ephemeral tributary to Garden Coulee. Receiving waters are ephemeral streams which are tributary to the Yellowstone River, located approximately 5 miles downstream. Treatment consists of a series of settling ponds designed to contain the runoff from a minimum 10-year, 24-hour precipitation event.

Outfall 001 consists of overflow from a series of north settling ponds that drain to North Pond 2, all of which treat storm water runoff from the north side of a natural divide. Outfall 001 discharges to Peabody Coulee. Storm water runoff from the south side of the divide drains to South Ponds 1, 2, and 3, which discharge through Outfalls 002, 003 and 005, respectively, to Garden Coulee. Outfall 004 consists of storm water runoff from the yard area, which includes offices and other buildings, following treatment in the Tipple Pond. Outfall 004 discharges to Peabody Coulee. Pit water is discharged to North Pond 2 and South Pond 1. Drainage from the coal crushing facility and coal storage area is collected in South Pond 3. Settling pond water is used for road dust control and discharges occur only in response to precipitation events that exceed the design capacity of the ponds. Only one discharge has occurred from any permitted outfall during the period of record from November 2000 through November 2009. That discharge was in November 2001 from Outfall 005 and lasted two days.

Agency Action and Applicable Regulations: The proposed action of the Department is to reissue the MPDES permit for another five-year cycle.

Applicable rules and statute:

Administrative Rules of Montana (ARM) Title 17, Chapter 30 – Water Quality

 Subchapter 2 - Water Quality Permit and Authorization Fees

 Subchapter 5 - Mixing Zones in Surface and Ground Water

 Subchapter 6 - Surface Water Quality Standards and Procedures

 Subchapter 7 - Nondegradation of Water Quality

 Subchapters 12 & 13 - Montana Pollutant Discharge Elimination System (MPDES) Standards

Montana Code Annotated (MCA), Title 75-5-101 et. seq., “Montana Water Quality Act”

Summary of Issues: The reissued permit authorizes five outfalls as discussed above. The previous permit authorized the same five outfalls. Effluent limits on total suspended solids (TSS) and pH during non-precipitation-related discharges remain the same as in the previous permit. Further, the settleable solids and pH effluent limits during precipitation-related events remain the same. The effluent limits on total iron and oil and grease (O & G) are more stringent in the reissued permit during non-precipitation-related discharges.

Self-monitoring requirements are included in the reissued permit in order to appropriately assure compliance with effluent limits and monitor other pollutants of concern. Additional requirements have been included in the reissued permit requiring acute Whole Effluent Toxicity (WET) testing once per year at each outfall. Wet testing will assess any negative effects caused by aggregate toxic effects of pollutants in the discharge(s).

Affected Environment & Impacts of the Proposed Project:

The Proposed Project consists solely of reissuance of an MPDES permit as discussed above and the scope of consideration of potential impacts on the physical and human environment is confined to only those impacts associated with reissuance of the MPDES permit. Potential impacts associated with mining, reclamation and other activities have been addressed previously associated with issuance of state mining permits and amendments.

Y = Impacts may occur (explain under Potential Impacts). Include frequency, duration (long or short term), magnitude, and context for any significant impacts identified. Reference other permit analyses when appropriate (ex: statement of basis). Address significant impacts related to substantive issues and concerns. Identify reasonable feasible mitigation measures (before and after) where significant impacts cannot be avoided and note any irreversible or irretrievable impacts. Include background information on affected environment if necessary to discussion.

N = Not present or No Impact will likely occur. Use negative declarations where appropriate (wetlands, T&E, Cultural Resources).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[N] No impacts anticipated from reissuance of MPDES permit.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[Y] All direct receiving waters are ephemeral streams that flow only as a result of precipitation. Discharges to the receiving waters, although authorized by permit, are extremely rare and typically occur as a result of runoff that exceeds the 10-yr, 24-hr precipitation event. All outfalls are associated with settling ponds designed to hold the runoff from a minimum 10-yr, 24-hr precipitation event. All effluent limitations on the proposed reissued permit are equal to those in the previous permit (see summary of issues above). Self-monitoring requirements are also retained from the previous permit (see summary of issues above). Due to their infrequent, precipitation-driven nature, permitted discharges are not expected to impact water quality, quantity, and distribution.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] No impacts anticipated from reissuance of MPDES permit.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] No impacts anticipated from reissuance of MPDES permit.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] No impacts anticipated from reissuance of MPDES permit.
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	[N] No known wetlands. No known federally listed threatened or endangered species or species of special concern present. No impacts anticipated from reissuance of MPDES permit.
7. SAGE GROUSE EXECUTIVE ORDER: Is the project proposed in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program)? If yes, did the applicant attach documentation from the Program showing compliance with Executive Order 12-2015 and the Program's recommendations? If so, attach the documentation to the EA and address the Program's recommendations in the permit. If project is in core, general or connectivity habitat and the applicant did not document consultation with the Program, refer the applicant to the Sage Grouse Habitat Conservation Program.	[N] DEQ consulted the sage grouse Executive Order map; the project is not located in core, general, or connectivity sage grouse habitat.
8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] Unknown. No impacts anticipated from reissuance of MPDES permit.
9. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] No impacts anticipated from reissuance of MPDES permit.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
10. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)	[N] No impacts anticipated from reissuance of MPDES permit.
11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] No impacts anticipated from reissuance of MPDES permit.

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] No impacts anticipated from reissuance of MPDES permit.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] No impacts anticipated from reissuance of MPDES permit.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] No impacts anticipated from reissuance of MPDES permit.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] No impacts anticipated from reissuance of MPDES permit.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] No impacts anticipated from reissuance of MPDES permit.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] No impacts anticipated from reissuance of MPDES permit.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] No impacts anticipated from reissuance of MPDES permit.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] No impacts anticipated from reissuance of MPDES permit.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No impacts anticipated from reissuance of MPDES permit.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No impacts anticipated from reissuance of MPDES permit.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] No impacts anticipated from reissuance of MPDES permit.

