Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

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February 8, 2006



John Lucas
Spring Creek Coal Company
PO Box 67
Decker, MT 59025

Dear Mr. Lucas:

Air Quality Permit #1120-07 is deemed final as of February 8, 2006, by the Department of Environmental Quality (Department). This permit is for a modification to Permit #1120-06 to increase maximum annual coal production from 15 million tons per year (MMTPY) to 20 MMTPY and to include another rail load-out facility. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

David L. Klemp
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3490

DK:jdr
Enclosure

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, Montana 59620
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**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

Issued For: Spring Creek Coal Company
P.O. Box 67
Decker, MT 59025

Air Quality Permit Number: 1120-07

*Preliminary Determination Issued*: 01/03/06
*Department Decision Issued:* 01/23/06
*Permit Final:* 02/08/06

1. *Legal Description of Site:* Spring Creek operates a surface coal mine located approximately 11 miles north of Decker, Montana. The mine covers portions of Sections 13, 14, 21, 23, 24, 25, 26, and 27 in Township 8 South, Range 39 East, and Sections 3, 10, 11, 15, 18, 19, 20, 27, 28, 29, 30, 31, 32, and 34 in Township 9 South, Range 40 East in Big Horn County, Montana.

2. *Description of Project:* Spring Creek submitted a permit application to modify Permit #1120-06 to increase maximum annual coal production from 15 MMTPY to 20 MMTPY. The application also requested to include Rail Load-out #2.

3. *Objectives of the Project:* The issuance of Permit #1120-07 would allow Spring Creek to implement the above mentioned increase in annual coal production and addition of a rail load-out facility. The company's objective is to provide business and revenue for the company. Spring Creek would continue to operate as a surface coal mine.

4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Spring Creek demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #1120-07.

6. *Regulatory Effects on Private Property Rights*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

| | | Major | Moderate | Minor | None | Unknown | Comments Included |
|---|---|---|---|---|---|---|---|
| A. | Terrestrial and Aquatic Life and Habitats | | | X | | | yes |
| B. | Water Quality, Quantity, and Distribution | | | X | | | yes |
| C. | Geology and Soil Quality, Stability, and Moisture | | | X | | | yes |
| D. | Vegetation Cover, Quantity, and Quality | | | X | | | yes |
| E. | Aesthetics | | | X | | | yes |
| F. | Air Quality | | | X | | | yes |
| G. | Unique Endangered, Fragile, or Limited Environmental Resource | | | X | | | yes |
| H. | Demands on Environmental Resource of Water, Air, and Energy | | | X | | | yes |
| I | Historical and Archaeological Sites | | | X | | | yes |
| J. | Cumulative and Secondary Impacts | | | X | | | yes |

**Summary of Comments on Potential Physical and Biological Effects:**
The following comments have been prepared by the Department.

**A. Terrestrial and Aquatic Life and Habitats;**
**B. Water Quality, Quantity, and Distribution;**
**C. Geology and Soil Quality, Stability, and Moisture;**
**D. Vegetation Cover, Quantity, and Quality; and**
**E. Aesthetics**

Overall impacts to the physical and biological environmental parameters noted above would be minor because the activities would occur within the current mining area with little or no additional surface disturbance. Furthermore, the current permit action would allow for an increase in the mining rate within the currently approved mine plan area. This would result in a relatively small increase in air pollutant emissions above those associated with the current mining rate. In the maximum emission scenario, there would be a particulate emission increase of approximately 27 percent above the current permitted level. All of the increase would be fugitive emissions. There would be a small increase in air pollutant deposition in the area and in the use of water for dust suppression.

**F. Air Quality**

The air quality impacts from the increased activities would be minor because Permit #1120-07 would include conditions limiting the visible emissions (opacity) from the plant operations, and would require water spray bars and other means to control air pollution. The plant operations would continue to be limited by Permit #1120-07 to total emissions of 250 tons per year or less from non-fugitive sources, including any additional equipment used at the site. This facility would continue to be considered a minor source of air pollution for the Title V program, because the facility's potential emissions would be below 100 tons per year. Overall, air emissions from the increased activities would have minimal impacts on air quality in the immediate and surrounding area because of the relatively small amount of additional pollutants generated. Air pollution controls currently used at the facility, such as fabric filtration, chemical stabilization, and water sprays, would reduce air emissions from equipment operations, storage piles, and haul roads.

## G. Unique Endangered, Fragile, or Limited Environmental Resources

The increased activities would occur within the previously disturbed industrial site at the mine. As part of the MEPA analysis on initial mine development, assessments of potential impacts to unique endangered, fragile, or limited environmental resources were done by the Department, including contact with the Montana Natural Heritage Program – Natural Resource Information System (NRIS) to identify species of special concern at the mine site. The likelihood that the increased mining rate would impact unique endangered, fragile, or limited environmental resources would be minor because of the relatively small increase in emissions, the lack of change to the mine plan area, and the conditions placed in Permit #1120-07.

## H. Demands on Environmental Resources of Water, Air, and Energy

The increased activities would require minimal additional amounts of water, air, and energy. Limited amounts of water would be required to be used for dust control for the equipment, product stockpiles, and surrounding haul roads. Further, as described in Section 7.F. of this EA, pollutant emissions generated from the operation would have minimal impacts on air quality in the immediate and surrounding area because of the relatively small increase in emissions, the lack of change to the mine plan area, and the conditions placed in Permit #1120-07. Overall, the demands and impacts to the environmental resource of water, air, and energy related to the increased activities would be minor.

## I. Historical and Archaeological Sites

The increased activities would occur within the previously disturbed industrial site at the mine. According to past correspondence from the Montana State Historic Preservation Office, there is low likelihood of adverse disturbance to any known archaeological or historic site because of previous industrial disturbance within the area. Therefore, the likelihood that the increased activities would have an impact on historical or archaeological sites would be minor.

## J. Cumulative and Secondary Impacts

The increased activities from the project would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment. There would be a relatively small increase in air emissions of particulate matter and $PM_{10}$ and no increase in the mine plan area.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

| | | Major | Moderate | Minor | None | Unknown | Comments Included |
|---|---|---|---|---|---|---|---|
| A. | Social Structures and Mores | | | | X | | yes |
| B. | Cultural Uniqueness and Diversity | | | | X | | yes |
| C. | Local and State Tax Base and Tax Revenue | | | X | | | yes |
| D | Agricultural or Industrial Production | | | X | | | yes |
| E. | Human Health | | | X | | | yes |
| F. | Access to and Quality of Recreational and Wilderness Activities | | | X | | | yes |
| G | Quantity and Distribution of Employment | | | | X | | yes |
| H. | Distribution of Population | | | | X | | yes |
| I. | Demands for Government Services | | | X | | | yes |
| J. | Industrial and Commercial Activity | | | X | | | yes |
| K. | Locally Adopted Environmental Plans and Goals | | | | X | | yes |
| L. | Cumulative and Secondary Impacts | | | X | | | yes |

**SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS:**
The following comments have been prepared by the Department.

**A. Social Structures and Mores**
**B. Cultural Uniqueness and Diversity**

The Department determined that the increased activities would not have an impact on the social structures and mores or the cultural uniqueness and diversity of this area of operation because the increase in the mining rate is relatively minor and the activities would occur within the previously disturbed industrial area. The surrounding area would remain unchanged as a result of the increased activities.

**C. Local and State Tax Base and Tax Revenue**

The increased activities would have little or no impact on the local and state tax base and tax revenue. No full time, permanent employees would be added as a result of issuing Permit #1120-07. The increase in the amount of equipment at the site would be minimal.

**D. Agricultural or Industrial Production**

The increased activities would occur within the previously disturbed industrial area; therefore, the Department would not expect an impact to or displacement of agricultural production. The increased activities would be relatively small compared to the existing mining operation and would have only a minor impact on local industrial production. In addition, the facility would operate

within the permitted mining area, which upon completion of mining operations, would be reclaimed, as specified, by the Environmental Management Bureau (EMB) of the Department. Minor and temporary effects may occur to agricultural land, and the EMB would be responsible for oversight of any reclamation activities.

**E. Human Health**

Permit #1120-07 would incorporate conditions to ensure that the increased activities would be accomplished in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As noted in Section 7.F. of this EA, the air emissions from this facility would be minimized by fabric filtration, water spray, chemical stabilization, and opacity limitations. Furthermore, the increased activities and resulting air emissions would be relatively small. Therefore, any associated impacts to human health would be minor based as a result of compliance with the applicable standards and operational conditions and limitations incorporated within the permit.

**F. Access to and Quality of Recreational and Wilderness Activities**

The increased activities would occur within the previously disturbed industrial property and would not impact access to recreational and wilderness activities. Minor impacts on the quality of recreational activities could be created from the noise from the increased activities; however, these would be small in comparison to existing activities. Emissions from the operation would be minimized as a result of the conditions that would be placed in Permit #1120-07. Therefore, the associated impacts on the access to and quality of recreational and wilderness activities would be minor.

**G. Quantity and Distribution of Employment; and**
**H. Distribution of Population**

As a result of the relatively small size of the operations associated with the increased activities, the quantity and distribution of employment and the distribution of population in the area would not be impacted. No full time, permanent employees would be added as a result of issuing Permit #1120-07 and no related secondary employment would be expected.

**I. Demands of Government Services**

Minor increases may be observed in the local traffic on existing roads in the area. Very limited additional government services would be required relative to these operations. Overall, demands for government services would be minor.

**J. Industrial and Commercial Activity**

The increased activities would represent only a minor increase in the industrial activity in the area because of the small production increase in comparison to the existing operation. No additional commercial activity would result because no secondary activities are expected to move to the area as a result of the increased activities.

**K. Locally Adopted Environmental Plans and Goals**

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed project. The state standards would protect the proposed site and the environment surrounding the site.

## L. Cumulative and Secondary Impacts

The increased activities would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because of the small increase in potential air emissions. Increases in traffic would have minor impacts on the local traffic in the immediate area. Because the project would be a relatively small increase of particulate emissions compared to the current operation, only minor economic impacts to the local economy would be expected. New businesses would not be drawn to any areas and permanent jobs would not be created or lost as a result of the proposed project.

Recommendation: An EIS is not required.

**If an EIS is not required, explain why the EA is an appropriate level of analysis**: All potential effects resulting from the proposed increase in activities are minor; therefore, an EIS is not required. In addition, the source would be applying the Best Available Control Technology and the analysis indicates compliance with all applicable air quality rules and regulations.

**Other groups or agencies contacted or which may have overlapping jurisdiction**: Montana Department of Environmental Quality - Permitting and Compliance Division; Montana Natural Heritage Program; and State Historic Preservation Office.

**Individuals or groups contributing to this EA**: Montana Department of Environmental Quality (Air Resources Management Bureau), Montana Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

EA prepared by: Eric Thunstrom
Date: October 18, 2005