Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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January 13, 2012

Randy Weimer
Environmental Manager – Stillwater Mining Company – Nye Facility
2562 Nye Road
Nye, Montana 59061

Dear Mr. Weimer:

Montana Air Quality Permit #2459-14 is deemed final as of January 13, 2012, by the Department of Environmental Quality (Department). This permit is for an underground platinum/palladium mine. 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,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Ed Warner
Environmental Engineer
Air Resources Management Bureau
(406) 444-2467

VW:EW
Enclosure

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Stillwater Mining Company
2562 Nye Road
Nye, MT 59061

Montana Air Quality Permit (MAQP) number: 2459-14

Preliminary Determination Issued: 12/12/11
Department Decision Issued: 12/28/11
Permit Final: 1/13/12

1. *Legal Description of Site*: The Stillwater Mine is located in Sections 1, 2, 10, 11, 15, 16, 21, and 23, Township 5 South, Range 15 East in Stillwater County, Montana.

2. *Description of Project*: The Stillwater Mining Company (Stillwater Mining) is proposing a modification of their MAQP. The modification would involve the addition of a 28 million British thermal units per hour (MMBtu/hr) propane-fired portal heater and an increase in the mine's underground ventilation capacity to 2,000,000 cubic feet per minute (cfm). The increase in mine ventilation is not associated with the addition of any new emitting units or change in mine operations.

3. *Objectives of Project*: The objective of installing the 28 MMBtu/hr portal heater is to replace an existing 13.5 MMBtu/hr portal heater that would be relocated to another area of the mine. These heaters provide additional warm air to the underground operations during the winter months, prevent water lines from freezing, prevent ice from forming at portal entrances, and contribute to a safer working environment. The increase in underground mine ventilation capacity is to meet Mine Safety and Health Administration (MSHA) standards as the total underground area expands.

4. *Alternatives Considered*: In addition to the proposed action, the Montana Department of Environmental Quality – Air Resources Management Bureau (Department) 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 Stillwater Mining 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 list of enforceable conditions, including a Best Available Control Technology (BACT) analysis, would be included in MAQP #2459-14.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do 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 Resources			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:
E. Aesthetics:
F. Air Quality:

The installation and operation of proposed portal heater would impact the above listed physical and biological resources in the proposed project area because emissions of particulate matter (PM), PM less than 10 microns in aerodynamic diameter (PM_{10}), PM less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur dioxide (SO_2) would increase at the facility. However, the Department believes that any impacts would be minor due to the relatively small amount of the above listed pollutants emitted, dispersion characteristics of pollutants and the atmosphere, and conditions placed in MAQP #2459-14, including, but not limited to, BACT requirements discussed in Section V of the permit analysis for this permit.

Further, from 1988 through June 2002, Stillwater Mining operated ambient air samplers to measure PM_{10} in the mine area and demonstrated that PM_{10} levels in the area fell below all applicable ambient standards. The Department believes that the minor amount of particulate emissions resulting from the proposed project would not change this impact from Stillwater Mining operations. Overall, any impact to the above listed physical and biological resources in the proposed project area would be minor as a result of the current permit action.

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

In an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources, the Department contacted the Montana National Heritage Program (MNHP). Search results concluded there are five species of concern and one ecological site

located within the vicinity of the facility. The search area, in this case, is defined by the township and range of the site with an additional one-mile buffer. The MNHP concluded that the Northern Goshawk, Uinta Chipmunk, Grizzly Bear, Wolverine, and Canada Lynx would potentially be located near the project site. The Department determined that based on the fact the Stillwater Mine is an existing industrial facility and that the proposed project would occur within the facility boundary, any effects on the local populations would be expected to be minor.

H. Demands on Environmental Resource of Water, Air, and Energy:

The installation and operation of the proposed portal heater would result in increased propane usage and result in a minor increase in energy demand in the area. Any impact on the environmental resource of energy in the area would be minor. In addition, the proposed project would not impact the demand for the environmental resource of water in the area as no water would be used to facilitate the heater. Further, an increase in air pollution would result from the proposed project; however, the Department believes that any impacts would be minor due to the relatively small amount of the above listed pollutants emitted, dispersion characteristics of pollutants and the atmosphere, and conditions placed in MAQP #2459-14, including, but not limited to, BACT requirements discussed in Section V of the permit analysis for this permit.

I. Historical and Archaeological Sites:

The proposed project would take place within a previously disturbed industrial site. According to past correspondence from the Montana State Historic Preservation Office (SHPO), there is low likelihood of adverse disturbance to any known archaeological or historic site, given previous industrial disturbance within the area. Therefore, it is unlikely that the current permit action would impact any known historic or archaeological site.

J. Cumulative and Secondary Impacts:

Overall, cumulative and secondary impacts from the proposed project would result in minor impacts to the physical and biological environment in the immediate area because emissions of PM, PM_{10}, $PM_{2.5}$, NO_x, CO, VOCs, and SO_2 would increase from the Stillwater Mining facility. Air pollution from the facility would be controlled by Department-determined BACT, as discussed in Section V of the permit analysis, and conditions in MAQP #2459-14. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #2459-14.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
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 Department has prepared the following comments.

A. Social Structures and Mores:
B. Cultural Uniqueness and Diversity:
C. Local and State Tax Base and Tax Revenue:
G. Quantity and Distribution of Employment:
H. Distribution of Population:

The proposed project would cause no disruption to the above-listed economic and social attributes of the area of operation because the proposed project would not involve the hiring of any new employees, increase potential industrial production at the existing mine, or change the existing industrial nature of the site or any surrounding area.

D. Agricultural or Industrial Production:

The proposed project would not displace or otherwise affect any agricultural land or practices because the compressors would be installed and operated within the existing Stillwater Mining industrial site. In addition, the proposed operations would not result in any increase in production and thus no increase in the amount of product available for further processing/refinement at the Stillwater Mine – Base Metals refinery in nearby Columbus, Montana. Overall, there would be no impact on agricultural or industrial production as a result of the proposed project.

E. Human Health:

The proposed project would result in a minor increase in air pollution from Stillwater Mine. However, MAQP #2459-14 would incorporate conditions including, but not limited to, the BACT requirements discussed in Section V of the permit analysis, to ensure that the operations would maintain compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health. Any impact to human health from the proposed project would be minor.

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

The proposed changes to the Stillwater Mining facility would take place at the existing facility and would therefore not have any effect on any access to and quality of recreational and wilderness activities.

I. Demands for Government Services:

Government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity:

The proposed project would not result in any increase in industrial or commercial activity at or near the Stillwater Mining site.

K. Locally Adopted Environmental Plans and Goals:

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

L. Cumulative and Secondary Impacts:

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social environment in the immediate area. As previously stated, the proposed permit changes would not result in any change to Stillwater Mining personnel and would not result in any increase in ore production at the facility. The Department believes that Stillwater Mining could be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #2459-14.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permit action is for the installation and operation of for a new portal heater for the purpose of increasing working comfort, preventing water lines from freezing, preventing ice from forming at portal entrances, and contributing to a safer working environment. Underground mine ventilation capacity would also be increased to meet MSHA regulations for planned future underground expansion; however, no new emitting units or process changes are associate with this change at this time. MAQP #2459-14 would include conditions and limitations to ensure the facility would operate in compliance with all applicable air quality rules and regulations. In addition, there would be no significant impacts associated with this proposal, as described above.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air and Waste management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Ed Warner
Date: November 30, 2011