Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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November 19, 2010

Mr. Harold LaRon Briggs
Briggs Funeral Services, Inc.
300 S. Atlantic St.
Dillon, MT 59725

Dear Mr. Briggs:

Montana Air Quality Permit #4592-00 is deemed final as of November 19, 2010, by the Department of Environmental Quality (Department). This permit is for a multiple chamber human cremation unit. 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

Deanne Fischer, PE
Environmental Engineer
Air Resources Management Bureau
(406) 444-3403

VW:DF
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: Briggs Funeral Services, Inc.
300 S. Atlantic St.
Dillon, MT 59725

Montana Air Quality Permit Number: MAQP #4592-00

Preliminary Determination Issued: September 29, 2010
Department Decision Issued: November 3, 2010
Permit Final: November 19, 2010

1. *Legal Description of Site*: The Briggs Funeral Services, Inc. proposes to locate in Section 24, Township 7 South, Range 09 West, in Beaverhead County, Montana

2. *Description of Project:* Briggs Funeral Services, Inc. proposes to operate a 2010 Matthews Creation, IE-43 (Power Pak II) multiple chamber human cremation unit with a maximum incineration capacity of 150 lb/hr, and associated equipment. The crematory is fired on natural or low pressure gas and is capable of incinerating up to 150 lb/hr of human remains. Material (human remains) is loaded into the primary chamber. The after burner ignites and heats the secondary chamber to the required temperature. The secondary chamber temperature of 1500 ˚F, with no single reading less than 1400 °F, is maintained by a process controller that automatically modulates the gas flow to the afterburner. After the secondary chamber has been heated sufficiently, the cremator burner ignites and the cremation process is initiated.

   Initial and supplementary combustion is provided by two natural gas-fired burners, one in the primary chamber and one in the secondary chamber, with a total maximum rated design capacity of 2,000 scf/hr.

3. *Objectives of Project*: The objective of the project is to generate revenue and provide a safe means of disposal of human remains

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 Briggs Funeral Services, Inc. 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 BACT analysis, would be included in MAQP #4592-00.

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

Emissions from the proposed project would affect terrestrial and aquatic life and habitats in the proposed project area. However, as detailed in Section V and Section VI of the permit analysis, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

Further, the proposed crematorium would require only a limited amount of construction and would operate within a building located in an area zoned as commercial and currently used as an auto body shop. Overall, any impact to the terrestrial and aquatic life and habitats of the proposed project area would be minor.

B. Water Quality, Quantity and Distribution

The project would not be expected to affect water quantity or distribution in the project area. The crematorium would operate within a building and would not discharge or use water during operation.

Emissions from the project may affect water quality in the project area due to air pollutant deposition. However, any emissions and resulting deposition impacts from the project would be very minor due to the low concentration of those pollutants emitted.

C. Geology and Soil Quality, Stability and Moisture

The project would not be expected to affect the geology, stability, and moisture of the project area. The proposed crematorium would require only a limited amount of construction and would operate within a building located in an area zoned as commercial and currently used as an auto body shop.

Proper crematorium operation would result in minor air pollution emissions to the ambient environment. These pollutants would deposit on the soils in the surrounding area. However, any impact from deposition of these pollutants would be very minor due to dispersion characteristics and the low concentration of those pollutants emitted.

D. Vegetation Cover, Quantity, and Quality

Air emissions from the project may affect vegetation cover, quantity, and quality in the project area. However, any emissions and resulting impacts from the project would be minor due to the dispersion characteristics and the low concentration of those pollutants emitted.

Further, the crematorium would operate within an existing building. Overall, any impact to the vegetation cover, quantity, and quality of the proposed project area would be minor.

E. Aesthetics

The project would result in a minor impact to the aesthetic nature of the project area. The crematorium would operate within a building. Further, visible emissions from the source would be limited to 10% opacity. Therefore, the project would result in only a minor impact to aesthetics of the area.

F. Air Quality

The project would result in the emissions of various criteria pollutants and HAPs to the ambient air in the project area. However, it has been demonstrated by air dispersion modeling that any air quality impacts from the project would be minor and would constitute negligible risk to human health and the environment.

The Department conducted air dispersion modeling to determine the ambient air quality impacts from HAPs that would be generated by the crematorium. The SCREEN3 model was selected for the air dispersion modeling. The full meteorology option was selected to provide a conservative result. Receptors were placed from 5 to 5,000 meters in a simple terrain array.

Stack parameters and emission rates used in the SCREEN3 model are contained in Section V of the permit analysis and are on file with the Department. Stack velocity and gas temperature were taken from data provided by the manufacturer of the crematorium. Due to the dispersion characteristics and low levels of pollutants that would be emitted from the proposed project, the Department determined that any impacts to air quality would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The current permit action could result in minor impacts to any existing unique endangered, fragile, or limited environmental resource in the proposed area of operation. However, the proposed crematorium would require only a limited amount of construction and would operate within a building located in an area zoned as commercial thereby limiting the potential for impact to any unique endangered, fragile, or limited environmental resource in the proposed location.

Further, emissions from the proposed project could impact any existing unique endangered, fragile, or limited environmental resource located in the proposed project area. However, as detailed in Section VI of the permit analysis, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted. Overall, any impact to this unique endangered, fragile, or limited environmental resource of the proposed project area would be minor.

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

The proposed project would result in minor demands on environmental resources of water and air as discussed in Section 7.B and 7.F, respectively, of this EA. Further, as detailed in Section V and Section VI of the permit analysis, project impacts on air resources in the proposed project area would be minor due to dispersion characteristics and the low concentration of those pollutants emitted. Finally, because the project is small by industrial standards, little energy would be required for operation and the resulting impact on energy resources would be minor.

I. Historical and Archaeological Sites

The proposed project would not result in any impacts to historical and archaeological sites in the proposed project area because the crematorium would require only a limited amount of construction and would operate within a building located in an area zoned as commercial and currently used for commercial purposes. According to correspondence from the Montana State Historic Preservation Office, there is low likelihood of adverse disturbance to any known archaeological or historic site, given previous industrial disturbance within a given area. Therefore, the operation would have no effect on any known historic or archaeological site.

J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts from this project on the environment in the immediate area would be minor. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #4592-00.

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

The proposed project is to install a 150 lb/hr cremation incinerator for human remains at an existing place of business. The incinerator's emissions would be extremely low on an industrial scale and opacity limitations of MAQP #4592-00 would require 10% or less opacity while operating. Any change to social structures or mores would be minor, if any.

B. Cultural Uniqueness and Diversity

The proposed project would not cause a change in the cultural uniqueness and diversity of the area because the incinerator is proposed to be installed in an existing business; therefore, the land use would not be changing.

C. Local and State Tax Base and Tax Revenue

The proposed project may provide additional revenue for Briggs Funeral Services, Inc. However, no need for additional employees would be expected as a result of this project. Therefore, little, if any impacts to the local and state tax base and tax revenue are anticipated from this project.

D. Agricultural or Industrial Production

The proposed project would not result in a reduction of available acreage of any agricultural land. Furthermore, the potential-to-emit of the proposed project is extremely small. Based on the small amount of emissions and the dispersion of those emissions, no discernable amount of impact would be expected to agricultural or industrial production in the area.

E. Human Health

As described in Section VI of the Permit Analysis, modeling and analysis of hazardous air pollutants showed negligible risk to human health. Furthermore, the potential-to-emit of conventional pollutants would be extremely small. Impacts to human health would be minor, if any discernable amount at all.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project is to install the incinerator at an existing place of business. No change to access of recreational and wilderness activities would be expected. Permit conditions would require opacity of the emissions to be 10% or less while operating. The potential-to-emit of the proposed incinerator would be very small. Therefore, minor, if any impact to the quality of recreational and wilderness activities would be expected as a result of this project.

G. Quantity and Distribution of Employment

No need for a change in the number of employees would be expected as a result of this project. Therefore, no impacts to the quantity and distribution of employment would be expected.

H. Distribution of Population

No need for a change in the number of employees would be expected and no other factors affecting distribution of population would be expected to be present as a result of this project. The project proposes to install the incinerator in an existing place of business. Furthermore, opacity limitations in the permit would require a 10% or less opacity of emissions. Therefore, no impacts to the distribution of population would be expected.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permits from government agencies. In addition, the permitted source of emissions would be subject to periodic inspections by government personnel. Overall, demands for government services would be minor.

J. Industrial and Commercial Activity

The proposed project would result in only a minor impact on local industrial and commercial activity because the crematorium would require only a limited amount of new construction, would operate within a building located in an area zoned as commercial and currently used for such purposes, and would not result in additional industrial production. Overall, any impacts to industrial and commercial activity in the proposed area of operation would be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals this project may impact. The state standards would be protective of the proposed project area.

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 due to the relatively small size of the operation. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #4592-00.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a crematorium (incinerator). MAQP #4592-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

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 Resources Management Bureau

EA prepared by: Deanne Fischer
Date: 09/28/2010