



Montana Department of
ENVIRONMENTAL QUALITY

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July 5, 2013

Mr. Barri Twardoski
United States Department of Health and Human Services
National Institutes of Health
Rocky Mountain Laboratories
903 South 4th Street
Hamilton, MT 59840

Dear Mr. Twardoski:

Montana Air Quality Permit #2991-05 is deemed final as of July 4, 2013, by the Department of Environmental Quality (Department). This permit is for a biomedical research 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,

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JM:DF
Enclosure

DEPARTMENT OF ENVIRONMENTAL QUALITY
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FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: U.S. Department of Health and Human Services
National Institutes of Health
Rocky Mountain Laboratories
903 South 4th Street
Hamilton, MT 59840

Montana Air Quality Permit (MAQP) Number: 2991-05

Preliminary Determination Issued: May 31, 2013

Department Decision Issued: June 18, 2013

Permit Final: July 4, 2013

1. *Legal Description of Site:* The legal description of the facility is the NE¼ of Section 36, Township 6 North, Range 21 West, Ravalli County, Montana.

Description of Project: The current permit action would replace the air pollution control devices (APCD) on the existing Hospital Medical Infectious Waste Incinerator (HMIWI), would add three emergency/back-up power generators (an existing 500 kW and new 1,250 kW now, and a 1,500 kW in 2014); ten above ground fuel oil storage tanks (AST) (one existing 500 gallon, one new 500 gallon, one 600 gallon, two 800 gallon, and one 3,000 gallon ASTs to be added now; and four 12,000 gallon ASTs to be added in 2014), and 15 laboratory fume hoods to support uninterrupted operation at the laboratories.

2. *Objectives of Project:* Rocky Mountain Laboratories (RML) is proposing to upgrade/replace the APCD on the existing HMIWI to achieve full compliance with the new emissions guidelines in 40 CFR 60 Subpart Ce as promulgated October 6, 2009. The current permit action would include the addition of three emergency/back-up status power generators, 10 ASTs, and 15 laboratory fume hoods to support uninterrupted operation at the laboratories.
3. *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 RML demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
4. *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 #2991-05.
5. *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.

6. *Environmental Impact Statement:* This EA addresses potential impacts associated with the construction and operation of the equipment proposed under the current Montana Air Quality Permit action.
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 in Section 4 of this EA.*

		Major	Moderate	Minor	None	Unkn wn	Comme nts 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

The Bitterroot River valley provides habitat for and contains many species of terrestrial wildlife. Large terrestrial species include, but are not limited to, Whitetail and Mule deer, elk, big horn sheep, mountain goats, black bear, mountain lion, and moose. In addition, the Bitterroot valley provides habitat for and contains numerous varieties of smaller mammalian species and many resident and migrant bird species including, but not limited to, raptors, waterfowl, and upland game birds. The Bitterroot Wildlife Management area is located approximately 8 miles northeast of the site.

Further, the Bitterroot River drainage, located approximately ¼ mile east of the RML facility site. The Bitterroot River contains various game-fish species including, but not limited to, two species of special concern (bull trout and westslope cutthroat trout), brook trout, rainbow trout, and brown trout, and numerous non-game-fish species.

Any impacts resulting from the proposed project to terrestrial and aquatic life and habitats would be minor because all required construction activities would take place within the defined RML campus, an existing industrial site. Further, minor impact to the surrounding area from the air emissions (see Section V of the permit analysis) would be realized due to dispersion of pollutants. As previously discussed, terrestrials would use the general area of the facility. However, the area around the campus is fenced to limit access to the facility. The existing fencing would likely not restrict access from all animals that frequent the area, but may discourage some animals from entering the campus property. Further, because the facility is an existing industrial site, terrestrials that routinely inhabit the area are accustomed to the industrial character of the facility. In addition, because RML is not proposing to directly discharge any material to surface or ground water sources in the area, aquatic life and habitats would realize little or no impact from the proposed facility.

The ambient air quality impact analysis of the air emissions from the proposed project and facility as a whole indicates that the air impacts from RML emissions on land or surface water would be minor and would consume only a small portion of the ambient air quality standards as discussed in Section V of the permit analysis (also see Section 8.F of this EA). The small amount of air impact would correspond to an equally small amount of deposition. Overall, any impact to terrestrial and aquatic life and habits from the proposed project would be minor.

B. Water Quality, Quantity and Distribution

The proposed project would not result in any impacts to water quantity or distribution in the area of operation because none of the proposed new equipment would require additional water for proper operation nor would any of the proposed equipment require discharge to any area surface water resource.

Emissions from the proposed project would result in impacts to water quality in the project area. However, as detailed in Section V of the permit analysis (also see Section 8.F of this EA) any emissions and resulting deposition impacts from the project would be minor due to the low concentration of emissions in the discharge and dispersion characteristics of the surrounding area. Overall, any impact to water quality, quantity, and distribution in the proposed area would be minor.

C. Geology and Soil Quality, Stability and Moisture

The impacts to the geology and soil quality, stability, and moisture from this permit action would be minor because it would disturb areas within the existing facility boundaries. Soil stability in the immediate vicinity of the existing facility would likely be impacted by the new footings and foundations required for the new larger ASTs. However, because the proposed construction would take place within an existing industrial site (approximate 33 acre RML campus) it is unlikely that any new facility construction activities would impact soil quality, stability, and moisture.

Some of the air emissions may deposit on local soils; however, air emissions deposition would result in only a minor impact to local areas because of the relatively low level of pollutant emissions and dispersion characteristics of the area, as discussed in Section V of the permit analysis (also see Section 8.F of this EA). Overall, any impacts to the existing geology and soil quality, stability, and moisture of the area would be minor.

D. Vegetation Cover, Quantity, and Quality

Emissions from the proposed project would impact vegetation cover, quantity, and quality in the proposed project area because operation of the proposed equipment would result in increased emissions from the facility. However, as detailed in Section V (also see Section 8.F of this EA) of the permit analysis any emissions and resulting impacts from the project would be minor because of the relatively low level of pollutant emissions and dispersion characteristics of the area.

Further, the proposed action would require only a minor amount of new construction and ground disturbance, which would take place within the existing RML campus. Overall, any impact to the vegetation cover, quantity, and quality of the proposed project area would be minor.

E. Aesthetics

The proposed facility would include the installation of 10 ASTs and diesel fueled emergency generators engines. However, because the proposed area of construction is located in a previously disturbed industrial location surrounded by the remainder of the RML campus, any aesthetic impacts would be minor and consistent with current land use in the area.

The facility is visible from MT Highway 93 (approximately ¼ mile to the east), residential homes surrounding the RML campus, and may be visible from the Bitterroot River (approximately ¼ mile to the east). However, emission controls would be required in MAQP #2991-05 to minimize gaseous emissions and opacity would be limited to 20% or less.

Further, the proposed project would result in additional noise in the area. The noise impacts from this permit action on the surrounding area would be minor because the proposed equipment would be housed in buildings located within the property boundary thus minimizing potential noise impacts due to the distance between the facility and the surrounding residences. In addition, any noise impacts would be consistent with similar noise impacts currently in place at the RML facility.

It is not expected that the area would receive any appreciable increase in vehicle use and travel. The facility would be located very near to an existing truck route (MT Highway 93) and to other industrial facilities that currently use the route. Vehicles would likely use the existing roads in the area en route to the roads established as part of the actual facility. Visible emissions from access roads (whether the county's responsibility or RML's responsibility) would be limited to 20% opacity.

Overall, any aesthetic impact from the proposed project would be minor and similar to existing impacts resulting from RML operations.

F. Air Quality

The RML facility is located in an area considered unclassified/attainment for all National and Montana Ambient Air Quality Standards (NAAQS and MAAQS). Under the current permit action, RML proposed the addition of various equipment that would result in an actual and potential increase in emissions of PM, PM₁₀, NO_x, VOC, CO, and SO₂ from the permitted facility. The air quality impacts from the proposed project would be minor. MAQP #2991-05 would include conditions limiting emissions of these pollutants from the various emitting units proposed under the current permit action, as applicable. Further, non-fugitive sources at the facility would be limited by permit to criteria pollutant emissions of 250 tons per pollutant or less during any rolling 12-month time period.

In addition, as described in Section V of the permit analysis to this permit (Air Quality Impacts), NO_x air dispersion modeling was conducted prior to issuance of MAQP #2991-01 to demonstrate compliance with the MAAQS/NAAQS. At that time, the RML facility used approximately 7% of the annual NO_x NAAQS/MAAQS and approximately 22% of the 1-hour NO_x NAAQS/MAAQS. The total facility change in calculated potential NO_x emissions, since the last NO_x modeling demonstration, is an increase of approximately 51 tons per year. However, as noted in the permit analysis, this increase can be attributed to the emergency backup generators at the site and “The Modeling Requirements and Montana Ambient Air Quality Standards Compliance Demonstration Guidance for Air Quality Preconstruction Permits” (Modeling Guidance) states that modeling is not routinely required for emergency backup generators. Therefore, in accordance with the Department’s Modeling Guidance, modeling would not be required for the current permit action because potential applicable NO_x emissions added to the facility since the last modeling exercise, do not exceed the applicable NO_x modeling threshold. Also, because the NO_x modeling conducted for MAQP #2991-01 demonstrated that the facility uses a very low percentage of the annual and 1-hour NO_x NAAQS/MAAQS. The Department determined that the increase in potential NO_x emissions from the current project are attributed to the emergency backup generators only, and would not cause or contribute to an exceedance of the NO_x NAAQS/MAAQS. Further, in the view of the Department, the relatively small amount of other regulated pollutant emissions resulting from the proposed project would not cause or contribute to an exceedance of any other applicable NAAQS/MAAQS. Overall, any impacts to air quality from the proposed project would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Because operation of the proposed equipment would result in increased emissions from the facility, impacts to unique, endangered, fragile, or limited environmental resources located in the proposed project area would occur. However, as detailed in Section V of the permit analysis (see also Section 8.F of this EA), any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

Further, the proposed new equipment would operate within an existing industrial area. Overall, any impact to any existing unique, endangered, fragile, or limited environmental resources in the proposed project area would be minor.

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

The proposed project would not result in any increased demand for the environmental resource of water because operation of the proposed equipment would not require additional water use for normal operations. Further, as detailed in Section V of the permit analysis (see also Section 8.F. of this EA), project impacts on air resources in the proposed project area would be minor due to dispersion characteristics of the pollutants emitted and the low concentration of those pollutants emitted. Finally, the proposed new power generators would be “fired” with diesel fuel. MAQP #2991-05 would include a limit on the annual hours of operation of the diesel emergency generators to maintain emergency/back-up status for these units, and thus limit the demand for energy. Overall, any demands for environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

The proposed project would not result in any impact to any existing historical and archaeological sites in the proposed project area because the proposed new equipment would operate within an existing industrial area and would not require any additional construction outside of the property

boundary. Also, according to previous correspondence from the Montana State Historic Preservation Office, there is low likelihood of any disturbance to any known archaeological or historic site, given previous industrial disturbances within a given area. Therefore, the proposed project would have little or no chance of impacting any known historic or archaeological site that may be located within or near the proposed operating site.

J. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from the proposed project on the physical and biological resources of the human environment in the immediate area would be minor due to the fact that the predominant use of the surrounding area would not change as a result of the proposed project. 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 #2991-05.

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 proposed project would not have any impact on the social structures and mores or the cultural uniqueness and diversity of the proposed area of operation because the project would include adding equipment to the permitted facility to facilitate operations similar to existing operations at the RML facility. The predominant use of the surrounding area would not change as a result of the proposed project.

C. Local and State Tax Base and Tax Revenue

The proposed project would not have any impact on the local and state tax base and tax revenue because the project would include adding equipment to the permitted facility to facilitate operations similar to existing operations at the RML facility. Any economic impact to the area would be minor because the proposed project would not change typical operations at the facility. Further, there would be no change in the number of employees/operators required for normal operations of the proposed equipment. Overall, any impact to local and state tax base and tax revenue would not change as a result of the installation and operation of the proposed new equipment at the facility.

D. Agricultural or Industrial Production

Because the proposed project would operate within the existing boundaries of the RML campus, the project would not impact or displace any land used for agricultural production. Further, the nature of the project would not result in additional industrial production.

E. Human Health

The Clean Air Act (CAA), which was last amended in 1990, requires EPA to set NAAQS for pollutants considered harmful to public health and the environment. The federal Clean Air Act established two types of NAAQS, Primary and Secondary. Primary Standards are limits set to protect public health, including, but not limited to, the health of “sensitive” populations such as asthmatics, children, and the elderly. Secondary Standards are limits set to protect public welfare, including, but not limited to, protection against decreased visibility, damage to animals, crops, vegetation, and buildings. MAQP #2991-05 would contain conditions and limitations that would require compliance with all applicable national and state air quality standards, including the federal primary and secondary standards. Therefore, because the proposed project would result in an increase in air pollutants but would require compliance with the NAAQS/MAAQS any impact to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

Because the proposed project would operate within the existing RML campus, the project would not impact any access to or quality of any recreation or wilderness activities in the area.

G. Quantity and Distribution of Employment

H. Distribution of Population

The installation and operation of the proposed new equipment at the RML facility would utilize existing RML personnel for operations and would likely not require any new employees. Therefore, the proposed project would have little or no impact on the quantity and distribution of employment and population in the area.

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. Demands for government services would be minor.

J. Industrial and Commercial Activity

The proposed project would result in only minor impact on local industrial and commercial activity because the proposed project would be similar to existing activity at the RML facility and would operate within the existing RML campus. Further, the proposed project would not result in additional industrial production.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals in the immediate area affected by the proposed project. The state standards would be protective of the proposed project area.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from the proposed project on the economic and social resources of the human environment in the immediate area would be minor due to the fact that the predominant use of the surrounding area would not change as a result of the proposed project. 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 #2991-05.

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 replaces the APCD on the existing HMIWI, adds three emergency/back-up status power generators, ten fuel oil ASTs, and 15 laboratory fume hoods to support uninterrupted operation at the laboratories. MAQP #2991-05 includes conditions and limitations to ensure the facility would operate in compliance with all applicable rules and regulations. In addition, as detailed in the above EA there are no significant impacts associated with the proposed project.

Other groups or agencies previously 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: May 31, 2013