



PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: July 23, 2009

Name of Applicant: Praxair Inc. – North American Industrial Gases

Source: Portable Pumping Equipment

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 4437-00.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by August 10, 2009. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

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VW:TG
Enclosures

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

Issued To: Praxair, Inc. – North American Industrial Gases

Montana Air Quality Permit number: 4437-00

Preliminary Determination Issued: 07/23/09

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* Praxair submitted an application to operate a portable Huff and Puff 2 unit. MAQP #4437-00 would apply while operating at any location in Montana, except those areas considered to be tribal lands, or those areas in or within 10 km of certain PM₁₀ nonattainment areas. An addendum to this permit would be required if Yellowstone intends to locate in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana*
2. *Description of Project:* The Department received a permit application for the operation of a portable Huff and Puff 2 unit. Praxair proposes to operate this unit to pump CO₂ into newly-drilled wells to help stimulate production.
3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company through the increased production of oil and gas. The issuance of MAQP #4437-00 would allow Praxair to operate the permitted equipment at various locations throughout Montana.
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 Praxair has 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 #4437-00.
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

Terrestrials may use the same area as the Huff and Puff 2 operation. The proposed project would be considered a minor source of emissions by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life would be expected as a result from pollutant deposition.

Impacts on aquatic life may result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of water would be used for pollution control associated with road dust. Since only a minor amount of air emissions would be generated, only minor deposition would occur. Therefore, only minor and temporary effects to aquatic life and habitat would be expected from the proposed Huff and Puff 2 operation.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the surrounding roadways. However, pollutant deposition and water use would cause minor impacts as the facility would be small with seasonal and intermittent operations and only a small volume of water would be used. Overall, the equipment would be expected to have minor impacts to water quality, quantity, and distribution in the area of operations.

C. Geology and Soil Quality, Stability and Moisture

The facility would be a minor source of emissions by industrial standards and would typically operate in areas previously disturbed during well drilling. Therefore, impacts from the emissions from the Huff and Puff 2 would be expected to be minor.

The Huff and Puff 2 operation would have only minor impacts on soils in any proposed site location because the facility is relatively small in size and would only have relatively brief and intermittent operations. Therefore, any affects upon geology and soil quality, stability, and moisture at any proposed operational site would be expected to be minor.

D. Vegetation Cover, Quantity, and Quality

Because the equipment at the facility would be a minor source of emissions by industrial standards and would typically operate in areas previously disturbed for the digging of an oil and gas well, impacts from the emissions from the Huff and Puff 2 unit would be minor.

As described in Section 7.F of this EA, the amount of air emissions from this project would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the water usage is minimal, as described in Section 7.B, and the associated soil disturbance is minimal, as described in Section 7.C, corresponding vegetative impacts would be minor.

E. Aesthetics

The Huff and Puff 2 unit operation would be visible and may create additional noise while operating. However, MAQP #4437-00 would include conditions to control emissions, including visible emissions, from the plant. Also, because the operation would be portable, would operate on a relatively brief and intermittent basis, and would typically locate within remote areas, any visual and noise impacts would be expected to be minor and short-lived.

F. Air Quality

The air quality impacts from the Huff and Puff 2 operations would be minor because the facility would be relatively small. MAQP #4437-00 would include conditions limiting the opacity from the plant and other means to control air pollution. Further, MAQP #4437-00 would limit total emissions from the Huff and Puff 2 operation and any additional Praxair equipment operated at the site to 250 tons per year or less, excluding fugitive emissions.

This facility would be used on a temporary and intermittent basis, thereby further reducing potential air quality impacts from the facility. Additionally, the small and intermittent amounts of deposition generated from the Huff and Puff 2 unit operation would be minimal because the pollutants emitted would have minimal deposition on the surrounding area. Therefore, air quality impacts would be minor.

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

To assess potential impacts to unique endangered, fragile, or limited environmental resources in the proposed area of operations, the Department contacted the Montana Natural Heritage Program (MNHP) to identify any species of concern associated with the initial proposed site location (Section 13, Township 24 North, and Range 59 East, in Richland County, Montana). Search results concluded there are no known species of special concern. This presence of species of special concern may still be present, but have not been recorded. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer.

The current permit action would result in the emission of air pollutants, which may result in minor impacts to unique, endangered, fragile, or limited environmental resource in any given area of operation. However, given the temporary, seasonal, and relatively small industrial size of the operation, any impact would be minor and short-lived. In addition, initial and typical

operations would take place within a previously disturbed industrial location further limiting the potential for impact to any unique, endangered, fragile, or limited environmental resource in any proposed location of operation.

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

Due to the size of the facility, the Huff and Puff 2 unit operation would require only small quantities of water, air, and energy for proper operation. Relatively small quantities of water would be used for dust suppression. Energy requirements would also be small because the energy demands of the operation would be relatively small and the facility would not be used continuously. The facility would be expected to have brief and intermittent use. In addition, impacts to air resources would be minor because the source is small by industrial standards, with intermittent and brief operations, and because air pollutants generated by the facility would be dispersed. Therefore, any impacts to water, air, and energy resources in any given area would be minor.

I. Historical and Archaeological Sites

According to correspondence with the Montana State Historic Preservation Office (SHPO), there have been no previously recorded sites within the designated search locales. The absence of cultural properties in the area does not mean that they do not exist but rather may reflect the absence of any previous cultural resource inventory in the area.

As long as there will be no disturbance or alteration to structures over 50 years of age SHPO indicated there would be a low likelihood of disturbance to any known archaeological or historic site given that the facility would typically be locating in previously disturbed areas. Therefore, it is unlikely that the project would affect any known historic or archaeological site and any impacts would be minor.

J. Cumulative and Secondary Impacts

The proposed project would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance because the equipment is small and the facility would be expected to operate in areas designated and used for such operations. Additionally, this facility, in combination with the other emissions from equipment operations owned by Praxair at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be minor.

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 would cause only minor disruption to the social structures and mores in the area because the source would be a minor industrial source, and would only have temporary and intermittent operations.

B. Cultural Uniqueness and Diversity

The predominant use of any proposed area would be expected to remain the same. The cultural uniqueness and diversity of any area would have only minor, if any, effects imparted by the operation of this facility. This facility would be portable with seasonal and intermittent operations. Therefore, the cultural uniqueness and diversity of the area would not be expected to be affected. Effects, if any, would be minor.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor, if any, impacts to the local and state tax base and tax revenue because the proposed project would require very few employees. In addition, the facility would be a minor industrial facility with temporary, brief, and intermittent operations.

D. Agricultural or Industrial Production

The proposed project would have a minor impact on local industrial production since the facility would increase oil and gas production and air emissions slightly. Because minimal deposition of air pollutants would occur on the surrounding land, only minor, if any effects on the surrounding vegetation or agricultural production would occur. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation. The equipment at the facility would be a minor source of emissions and would typically operate in areas previously designated and used for oil and gas crushing.

E. Human Health

Conditions would be incorporated into the permit to ensure that the facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Further, the facility would operate on a temporary, intermittent, and seasonal basis and only minor impacts would be expected on human health from the proposed facility.

F. Access to and Quality of Recreational and Wilderness Activities

This facility would typically be located on previously disturbed property and would not impact access to recreational and wilderness activities. Minor impact on the quality of recreational activities might be created by noise. Air emissions would be minimized as a result of limitations placed in the Montana Air Quality Permit and the temporary and portable nature of the operation.

G. Quantity and Distribution of Employment

This facility would be a small, portable source, with brief and intermittent operations and would not be expected to have long-term effects upon the quantity and distribution of employment in any given area of operation.

H. Distribution of Population

The portable Huff and Puff 2 unit operation would be small and temporary in nature with very few employees. Therefore, the facility would be expected to have little, if any impact the normal population distribution in the area of operation or any future operating site.

I. Demands for Government Services

There would be a very small increase in traffic on existing roadways and highways in the area from the proposed project. Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor.

J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the proposed area of operation because the facility would continue to be a small industrial source, and be portable and temporary in nature. Very little additional industrial or commercial activity would be expected as a result of the proposed operation. Therefore, any impacts to the industrial and commercial activity would be minor.

K. Locally Adopted Environmental Plans and Goals

The proposed project would be allowed by its Montana Air Quality Permit to operate in areas designated by EPA as attainment or unclassified for ambient air quality. An addendum would be required to operate in or within 10 km of a PM₁₀ nonattainment area. The permit would contain maximum capacity and opacity limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility would be small and portable, any impacts from the project would be minor and short-lived.

L. Cumulative and Secondary Impacts

Overall, the proposed project would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would continue to be portable, and the footprint of the facility would remain relatively small. Further, no other industrial operations are expected to result from this permitting action. Any increase in traffic would have minor effects on local traffic in the immediate area.

This facility may be operated in conjunction with other equipment owned and operated by Praxair, but properly permitted and operated equipment will ensure any cumulative impacts or secondary impacts would be minor and short-term. In conclusion, the source would be relatively small, the facility emissions would be minimal, and the project would have only minor cumulative and secondary impacts.

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 portable trailer-mounted Huff and Puff 2 unit.

MAQP #4437-00 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, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Trista Glazier

Date: July 13, 2009