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PRELIMINARY DETERMINATION  
ON PERMIT APPLICATION

Date of Mailing: June 21, 2013

Name of Applicant: CHS Inc.

Source: Laurel Refinery

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 1821-30.

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 July 8, 2013. 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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Air Permitting Supervisor  
Air Resources Management Bureau  
(406) 444-3626

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Environmental Engineer  
Air Resources Management Bureau  
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JM:SH  
Enclosures

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Permitting and Compliance Division**  
**Air Resources Management Bureau**  
**1520 East Sixth Avenue**  
**P.O. Box 200901, Helena, Montana 59620-0901**  
**(406) 444-3490**

**DRAFT ENVIRONMENTAL ASSESSMENT (EA)**

*Issued For:* CHS Inc.  
Laurel Refinery  
P.O. Box 909  
Laurel, MT 59044-0909

*Montana Air Quality Permit (MAQP) Number:* 1821-30

*Preliminary Determination on Permit Issued:* 06/21/2013

*Department Decision Issued:*

*Permit Final:*

1. *Legal Description of Site:* South ½, Section 16, Township 2 South, Range 24 East in Yellowstone County.
2. *Description of Project:*

On April 15, 2013, CHS Inc. submitted an application for a modification to MAQP #1821-29. The application was submitted concurrently with CHS's request for renewal of Operating Permit OP1821-10 and included the following:

- 40 CFR 60, Subpart J applicability updates: Conditions indicating NSPS Subpart J applicability to all CHS Refinery's fuel gas combustion devices were updated to reflect NSPS Subpart Ja requirements, where necessary.
- Clarification of 40 CFR 60, Subpart Ja applicability: Specific to Boiler #12, CHS requested that the MAQP be clarified to reflect that Boiler #12 meets the NSPS Subpart Ja definition of a "fuel gas combustion device" requiring compliance with the SO<sub>2</sub> emission limit or the H<sub>2</sub>S in fuel gas limit.
- Railcar Light Product Loading Rack NESHAP applicability: Based on the facility's SIC code, 40 CFR 63, Subpart CC applies to the light product loading racks and 40 CFR 63, Subpart R does not apply. CHS requested clarification of this applicability within the MAQP.
- 40 CFR 60, Subpart GGGa applicability updates: The MAQP identified applicability of NSPS Subpart GGGa to refinery fuel gas supply lines to Boiler #12. However, because Boiler #12 commenced construction after November 7, 2006, it is subject to NSPS Subpart GGGa.
- 40 CFR 60, Subpart VV/VVa applicability updates: NSPS Subpart VV or VVa apply to affected facilities in the Synthetic Organic Chemical Manufacturing Industry (SOCMI). The CHS refinery is not classified as a SOCMI industry. The LDAR rules that apply to the CHS refinery include NSPS Subparts GGG

and GGGa and MACT Subpart CC. Each of these rules reference specific conditions in NSPS Subpart VV and VVa, CHS proposed reference only GGG or GGGa.

- Consent Decree reference updates: Several conditions in the MAQP still contained references to the consent decree where obligations have been met. CHS requested to have these references removed.
- References to Billings/Laurel SO<sub>2</sub> Emissions Control Plan, as approved into the SIP: CHS requested corrections be made to the MAQP where the SO<sub>2</sub> SIP was referenced incorrectly.
- “plant-wide” emissions limits: Since issuance of MAQP #1821-05, inadvertently, changes have been made to the original list of emitting units to be included in these emission caps for each pollutant. Additionally, as a result of the addition and removal of various emitting units since the creation of these emission caps, the term “plant-wide” is no longer appropriate. CHS requested the list be corrected and the term “plant-wide” removed from the permit.
- Administrative Amendments: CHS requested various administrative changes be incorporated into the MAQP.

3. *Objectives of Project:* The primary objectives of this permitting action would be to update MAQP #1821-29 with current applicable language.
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 MAQP to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because CHS 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 permit conditions and a complete permit analysis, including BACT determinations, would be contained in MAQP #1821-30.
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 to 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
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:

This permitting action would not result in increased pollutant emissions. The emission inventories from the emitting units reviewed would be updated to reflect the results of a recent re-examination of previous permitting actions. Additionally, the permitting action would result in the incorporation of the most current facility and emissions information available. Impacts to terrestrial and aquatic life and habitats are not anticipated as a result of this permitting action.

B. Water Quality, Quantity, and Distribution:

This permitting action would not result in increased pollutant emissions. Furthermore, this action would not result in a change in the quality or quantity of ground water. There also would not be any changes in drainage patterns or new discharges associated with this project. Therefore, no impacts to water quality, quantity, and/or distribution are anticipated.

C. Geology and Soil Quality, Stability, and Moisture:

No additional disturbance would be created from this permitting action. This permitting action would not change the soil stability or geologic substructure or result in any increased disruption, displacement, erosion, compaction, or moisture loss, which would reduce productivity or fertility at or near the site. No unique geologic or physical features would be disturbed. Therefore, no impacts to geology and soil quality, stability, and moisture are anticipated.

D. Vegetation Cover, Quantity, and Quality:

The permitting action would not result in new construction activity and no increased emissions are proposed. As such, the vegetative cover, quantity, and quality would not be disturbed inside the facility boundaries. Therefore, no impacts to vegetation cover, quantity, or quality are anticipated.

E. Aesthetics:

The permitting action would not result in new construction activity and no increased emissions are proposed. The action pertains to emitting units already used for industrial activities within the facility boundaries. No additional disturbance would occur as a result. Additionally, noise levels would not be expected to change as a result of this project. Therefore, no additional impacts on aesthetics are expected.

F. Air Quality:

The permitting action does not entail an increase in pollutant emissions. Previously modeled levels of pollutants (at allowable levels) show compliance with the NAAQS and the MAAQS. No impacts on air quality are anticipated.

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

The permitting action would not result in new construction activity and no increased emissions are proposed. Therefore, no impacts to unique endangered, fragile, or limited environmental resources are anticipated.

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

The permitting action would not result in new construction activity and no increased emissions are proposed. Therefore, additional consumption of energy and water resources is not anticipated and no impacts on air resources are anticipated.

I. Historical and Archaeological Sites:

The permitting action would not result in new construction activity and no increased emissions are proposed. Additionally, the applicable emitting units are located within the boundaries of an area previously disturbed. Therefore, no impacts to any historical and archaeological sites would be anticipated.

J. Cumulative and Secondary Impacts:

No increases in actual pollutant emissions are proposed and therefore, no cumulative and secondary impacts are anticipated.

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
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 permitting action would not cause a disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because no construction or physical alteration is proposed. The nature of the site will not be changed.

B. Cultural Uniqueness and Diversity:

The permitting action would not cause a change in the cultural uniqueness and diversity of the area because the land is currently used as a petroleum refinery; therefore, the land use would not be changing.

C. Local and State Tax Base and Tax Revenue:

The refinery's overall capacity would not change as a result of the permitting action. In addition, no new employees would be needed for this project. Therefore, no impacts to the local and state tax base and tax revenue are anticipated from this project.

D. Agricultural or Industrial Production:

The permitting action would not result in a reduction of available acreage or productivity of any agricultural land; therefore, agricultural production would not be affected. The refinery's overall capacity would not change as a result of the permitting action. Therefore, industrial production would not be affected.

E. Human Health:

As described in Section 7.F of the EA, no impacts on air quality are anticipated as a result of this permitting action. The emissions from this facility would remain within the facility-wide emissions caps established in MAQP #1821-05 in 2000. The air quality permit for this facility incorporates conditions to ensure that the facility would be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health. No impacts to human health would be expected from this permitting action.

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

This permitting action would not have an impact on recreational or wilderness activities because the site is far removed from recreational and wilderness areas or access routes. The action would not result in any changes in access to and quality of recreational and wilderness activities.

G. Quantity and Distribution of Employment:

No change in the number of employees currently onsite would be anticipated as a result of this permitting action. Therefore, the action would not have any impacts to the quantity and distribution of employment at the facility.

H. Distribution of Population:

This permitting action does not involve any significant physical or operational change that would affect the location, distribution, density, or growth rate of the human population. The distribution of population would not change as a result of this action.

I. Demands of Government Services:

The demands on government services would experience a minor impact. The primary demand on government services would be the acquisition of the appropriate permits by the facility and compliance verification with those permits.

J. Industrial and Commercial Activity:

The refinery's overall capacity would not change as a result of the proposed project. Therefore, no impacts on industrial activity at CHS would be expected. Industrial and commercial activity in the neighboring area would not be anticipated to be affected by issuing MAQP #1821-30.

K. Locally Adopted Environmental Plans and Goals:

The proposed project would not affect any locally adopted environmental plans or goals. CHS must continue to comply with the SIP and FIP and associated stipulations for the Billings/Laurel area. The Department is not aware of any locally adopted environmental plans and goals that would be impacted by this project.

L. Cumulative and Secondary Impacts:

No increases in actual pollutant emissions are proposed and therefore, no cumulative and secondary impacts are anticipated.

*Recommendation:* An Environmental Impact Statement (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 this permitting action would be minor; therefore, an EIS is not required. In addition, the source would be applying BACT and the analysis indicates compliance with all applicable air quality rules and regulations.

*Other groups or agencies contacted or which may have overlapping jurisdiction:* None.

*Individuals or groups contributing to this EA:* Department of Environmental Quality, Permitting and Compliance Division - Air Resources Management Bureau.

EA Prepared By: Skye Hatten

Date: May 16, 2013