

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	CHS Refinery Wastewater Outfall Structure
<b>Proposed Implementation Date:</b>	Winter 2017/Spring 2018
<b>Proponent:</b>	CHS, Inc.
<b>Location:</b>	A portion of Government Lot 3, Section 15, Township 2 South, Range 24 East (Yellowstone River – Public Land Trust)
<b>County:</b>	Yellowstone County

### I. TYPE AND PURPOSE OF ACTION

The CHS Laurel Refinery is requesting a 0.123 acre easement in the bed of the Yellowstone River for the installation of a new wastewater discharge outfall structure. It is proposed to be located in Govt Lot 3, Section 15, T2S, R24E in Yellowstone county. The outfall structure would be located on the north river bank, downstream of the Billings Bench Water Association (BBWA) intake structure. The proposed easement is shown on attached Exhibit A.

According to their application letter, the “...*proposed outfall location has been approved through the Montana Department of Environmental Quality as an approved discharge point and is identified as such in the MPDES Discharge Permit MT0000264. The structure must be located in close proximity to the river to utilize the approved mixing zone, reduce potential for bank/channel erosion, and meet design requirements. Further, the new outfall structure is necessary to achieve the discharge requirements set in the MPDES permit.*”

The new outfall structure will help the refinery locate in an area where they can get better mixing as their treated wastewater enters the Yellowstone River. The refinery is attempting to comply with the limits on discharge, mainly of selenium, contained in their discharge permit from the DEQ.

### II. PROJECT DEVELOPMENT

**1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:**

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

The DNRC Southern Land Office (SLO) did not perform any specific scoping or public involvement for this requested action.

**2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:**

Yellowstone Conservation District: 310 Permit (approved)  
Yellowstone County: Floodplain Permit  
US Army Corps of Engineers: Section 404 Permit  
Montana Department of Environmental Quality: MPDES Discharge Permit

**3. ALTERNATIVES CONSIDERED:**

**No Action Alternative:** Deny the request by CHS to issue an easement to allow the installation of new wastewater outfall structure on the bank of the Yellowstone River.

**Proposed Alternative:** Approve the request by CHS to issue an easement to allow the installation of new wastewater outfall structure on the bank of the Yellowstone River.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain **POTENTIAL IMPACTS AND MITIGATIONS** following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

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#### 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

The proposed action will result in disruption to a portion of the riverbed during the construction and installation of the new wastewater outfall structure and will also result in disturbance on the bank and shore which is outside of the DNRC's jurisdiction. CHS is proposing to riprap the bank after the new outfall structure is installed and also some rocks at the mouth of the outfall. No significant long term adverse impacts to geology and soil quality, stability are expected as a result of implementing the proposed alternative.

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#### 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

The proposed action may cause a short term increase in turbidity during the construction and installation of the new outfall through the use of temporary coffer dams and some dewatering in the main channel of the Yellowstone River. The proposed action is not expected to have a significant adverse impact on water quality, quantity or distribution.

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#### 6. AIR QUALITY:

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

Implementation of the proposed action will result in a temporary increase in emissions from heavy equipment that will be used in the project. No significant long term adverse impacts to air quality are expected by implementing the proposed action.

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#### 7. VEGETATION COVER, QUANTITY AND QUALITY:

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

The proposed action would allow the installation of a new wastewater outfall along the banks of the Yellowstone River. The portion of the project that is on state-owned land is entirely under the Yellowstone River. No significant impacts to vegetative cover, quantity and quality are expected by implementing the proposed action.

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#### 8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

The installation of a new wastewater outfall structure in the Yellowstone River is not expected to cause any habitat disturbance except during construction. No significant long-term adverse impacts to terrestrial, avian and aquatic life and habitats are expected by implementing the proposed action.

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#### 9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

A search of the Montana Natural Heritage Program database indicated that there were seven species of concern known to occur in the general project area and they were: Great Blue Heron, Yellow-billed Cuckoo, Bobolink, Baird's Sparrow, Sauger, Spiny Softshell and Alberta Snowfly.

Implementation of the proposed alternative may cause short term impacts to species of concern for the duration of the project construction. The noise from heavy equipment could disperse or cause wildlife to temporarily avoid the area. Once the project construction is complete, there are not expected to be any significant long term adverse impacts.

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**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

The proposed project would only disturb state-owned land under the Yellowstone River, therefore no cultural resources are expected to be discovered or impacted. No significant adverse impacts to historic or archaeological sites on state-owned land are expected as a result of implementing the proposed alternative.

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**11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

The proposed action would result in heavy equipment constructing a temporary coffer dam to allow for the installation of the new wastewater outfall structure along the north bank of the Yellowstone River. If the Proposed Alternative is implemented, there would be a short-term increase in sound due to the equipment utilized in construction. The outfall itself will be partially submerged, so it will be partially visible from the river and possibly Riverside Park on the opposite side of the river. Therefore, implementation of the proposed action is not expected to cause a significant adverse impact.

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**12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

Implementing the Proposed Alternative is not expected to result in a significant adverse impact on environmental resources.

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**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

The permits that are required by other local, state and federal agencies or departments for the proposed project are listed above in Section 2 of this EA. No other projects are known at this time.

<b>IV. IMPACTS ON THE HUMAN POPULATION</b>
<ul style="list-style-type: none"><li>• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i></li><li>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i></li><li>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i></li></ul>

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**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

The proposed action would provide for a new wastewater outfall for the CHS refinery and allow them to meet current discharge standards. Implementation of the Proposed Alternative is not expected to have a significant impact on human health and safety.

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**15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

*Identify how the project would add to or alter these activities.*

The new wastewater outfall structure would allow the CHS refinery to meet the standards of their discharge permit issued by DEQ. Implementation of the Proposed Alternative is not expected to have significant adverse impacts on industrial, commercial and agricultural activities and production.

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**16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

Implementation of the Proposed Alternative is not expected to have a significant impact on employment. The construction project will be of a relatively short duration and it is unknown at this time how many workers will be utilized.

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**17. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

Due to the nature of the project, implementation of the Proposed Alternative is not expected to have a significant impact on local and state tax base and revenues.

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**18. DEMAND FOR GOVERNMENT SERVICES:**

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services*

Implementation of the Proposed Alternative is not expected to have a significant impact on the demand for governmental services.

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**19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

Implementation of the Proposed Alternative is not expected to conflict with any locally adopted plans.

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**20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

The proposed action is not expected to cause any significant adverse long term impacts to access and quality of recreation and wilderness activities.

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**21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

Implementation of the Proposed Alternative is not expected to have significant adverse impacts on density and distribution of population and housing.

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**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by implementation of the Proposed Alternative.

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**23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

Implementation of the Proposed Alternative is not expected to have a significant adverse impact on cultural uniqueness or diversity.

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**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

The State will benefit by getting a one-time easement fee of \$150. The Public Land Trust is the beneficiary of this payment since it involves a state-owned riverbed.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Jeff Bollman, AICP	<b>Date:</b> 16 November 2017
	<b>Title:</b> Area Planner, Southern Land Office	

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<b>V. FINDING</b>
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**25. ALTERNATIVE SELECTED:**

After review, the proposed alternative has been selected and it is recommended that CHS be granted a 0.123 acre easement in the Yellowstone River for the installation of a new wastewater outfall structure in Section 15, T2S, R24E in Yellowstone County. The new outfall structure will occupy a small area of the riverbed and will allow the refinery to improve the quality of their wastewater discharge. This alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area.

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**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

The potential for significant adverse impacts has been lessened as much as possible based on the requested scope of work for the proposed project. There are no natural features that are expected to be impacted and produce significant adverse impacts if the proposed action is implemented.

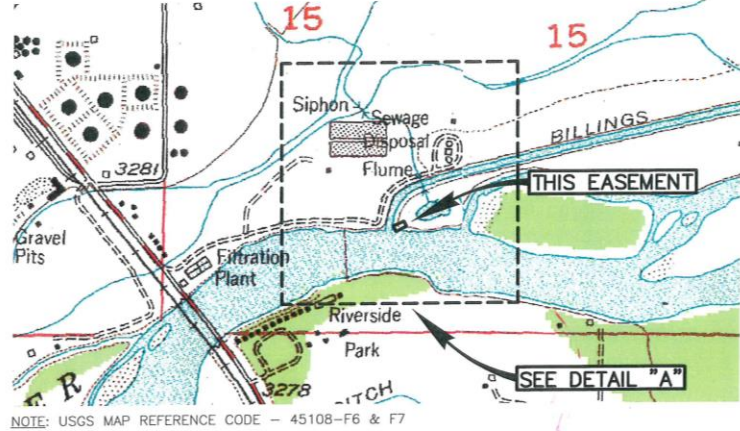
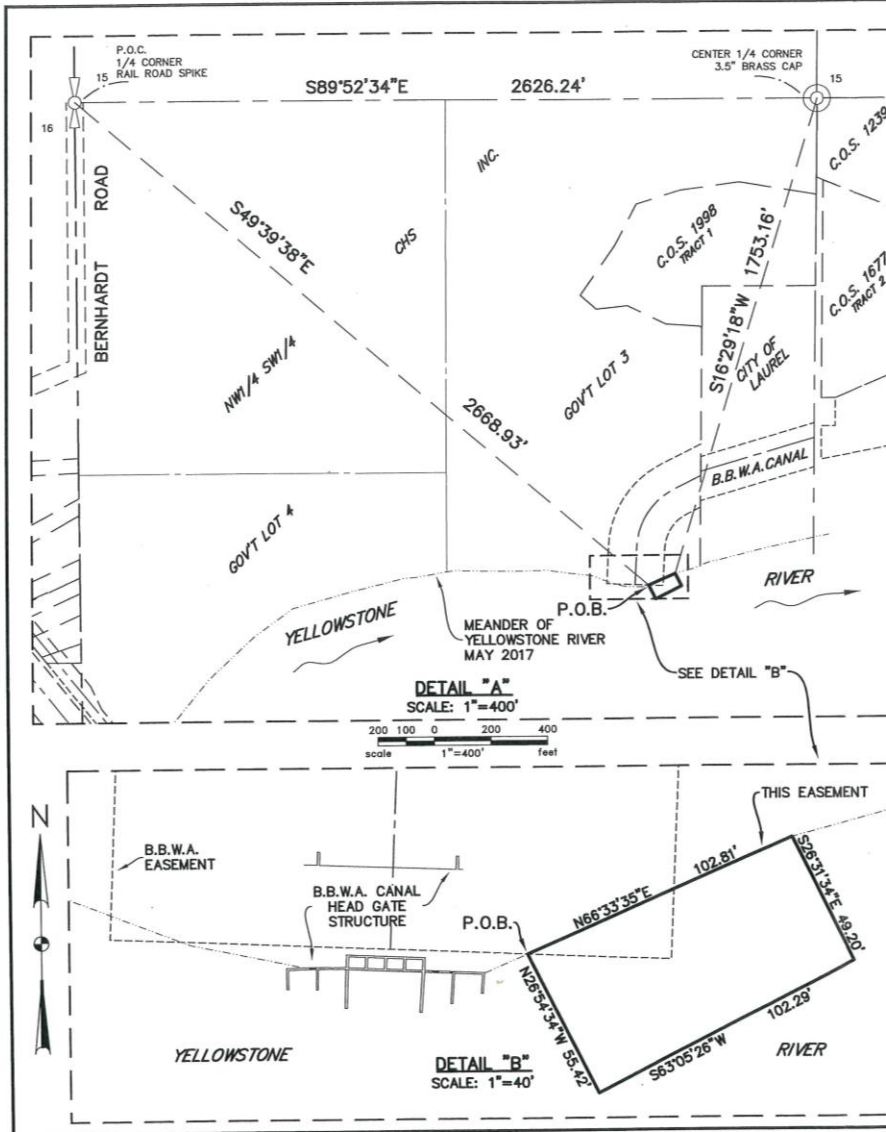
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**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

EIS       More Detailed EA       No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Jocee Hedrick
	<b>Title:</b> Land Use Specialist, Southern Land Office
<b>Signature:</b> /s/ Jocee Hedrick	<b>Date:</b> 11/16/17

**Exhibit A – Proposed Wastewater Outfall Easement**



**LEGAL DESCRIPTION**

A tract of land for the construction, maintenance, operation and shoreline protection of a pipeline situated in Gov't Lot 3 of Section 15, T.2S., R.24E., P.M.M., Yellowstone County, Montana, said tract being more particularly described as follows:

COMMENCING at the 1/4 Corner common to Sections 15 & 16, T.2S., R.24E., P.M.M.; thence S49°39'38"E, a distance of 2,668.93 feet to the POINT OF BEGINNING;

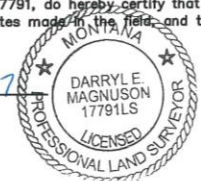
thence N66°33'35"E, a distance of 102.81 feet to a point which bears S16°29'18"W, a distance of 1,753.16 feet from the Center 1/4 Corner of said Section 15; thence S26°31'34"E, a distance of 49.20 feet; thence S63°05'26"W, a distance of 102.29 feet; thence N26°54'34"W, a distance of 55.42 feet to the POINT OF BEGINNING.

Said described tract containing a gross area of 5,360 square feet or 0.123 acres, more or less.

I, Darryl E. Magnuson, Professional Land Surveyor, MT No. PLS 17791, do hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief.

*Darryl E. Magnuson*  
 Darryl E. Magnuson  
 Montana Registration No. 17791 PLS

10/17/2017  
 Date



**BASIS OF BEARINGS:**

Geodetic North determined at Section Corner common to Sections 9, 10, 15 & 16, T.2S., R.24E., P.M.M. which is a 2 inch aluminum cap located at Latitude 45°40'05.79709"N, Longitude 108°45'40.30081"W, NAD83(2011) (Epoch 2010.0000).

Bearings shown are grid bearings and have not been adjusted for convergence. Distances shown are ground distances.

