SEPA **ENVIRONMENTAL CHECKLIST**

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

This Checklist was prepared by the Mead Custodial Trust (MCT) at the request of Washington Department of Ecology (Ecology) Industrial Section. This Checklist follows the SEPA Environmental Checklist template obtained from the Ecology website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-document-templates) on November 15, 2018. The Checklist is identical to the template with the following exceptions:

- *All text added to the template by MCT is shown in italicized fonts.*
- *The original template contains hotlinks that link to instruction on how to complete the template. These hotlinks have been removed for clarity.*

A. Background

1. Name of proposed project, if applicable: *Kaiser Mead NPL Site Groundwater Interim Action*

2. Name of applicant: *Mead Custodial Trust*

3. Address and phone number of applicant and contact person:

Dan Silver
Mead Custodial Trust
606 Columbia St. NW, Ste. 212
Olympia, WA 98501
(360) 754-9343

4. Date checklist prepared: January 30, 2019

5. Agency requesting checklist: *Washington Department of Ecology, Industrial Section*

6. Proposed timing or schedule (including phasing, if applicable):

Engineering design is anticipated to begin in 2019. Construction would begin after Ecology approvals, expected to occur in 2019.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No changes are anticipated.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

The project is described in the February 2019 "Kaiser Mead Interim Action Workplan" prepared by Hydrometrics for the Mead Custodial Trust. Additional information is available in the October 2018 " Supplemental Feasibility Study for Kaiser Mead NPL Site" prepared by Hydrometrics for the Mead Custodial Trust.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There are no pending applications.

10. List any government approvals or permits that will be needed for your proposal, if known.

- *Notice of Intent for construction of dewatering/resource protection wells.*
- *Compliance with substantive requirements of State Waste Discharge Permit for discharge treated water to groundwater as described in Appendix A of the Interim Action Workplan.*
- *Electric permit from WA Labor and Industries*
- *Local (Spokane County) permits or approvals are anticipated and may include:*
    - *Building Permit*
    - *Erosion and Control Plan approval*
    - *Critical and Hazardous Materials List/Hazardous Material Management Plan approval*
    - *Septic system permit.*

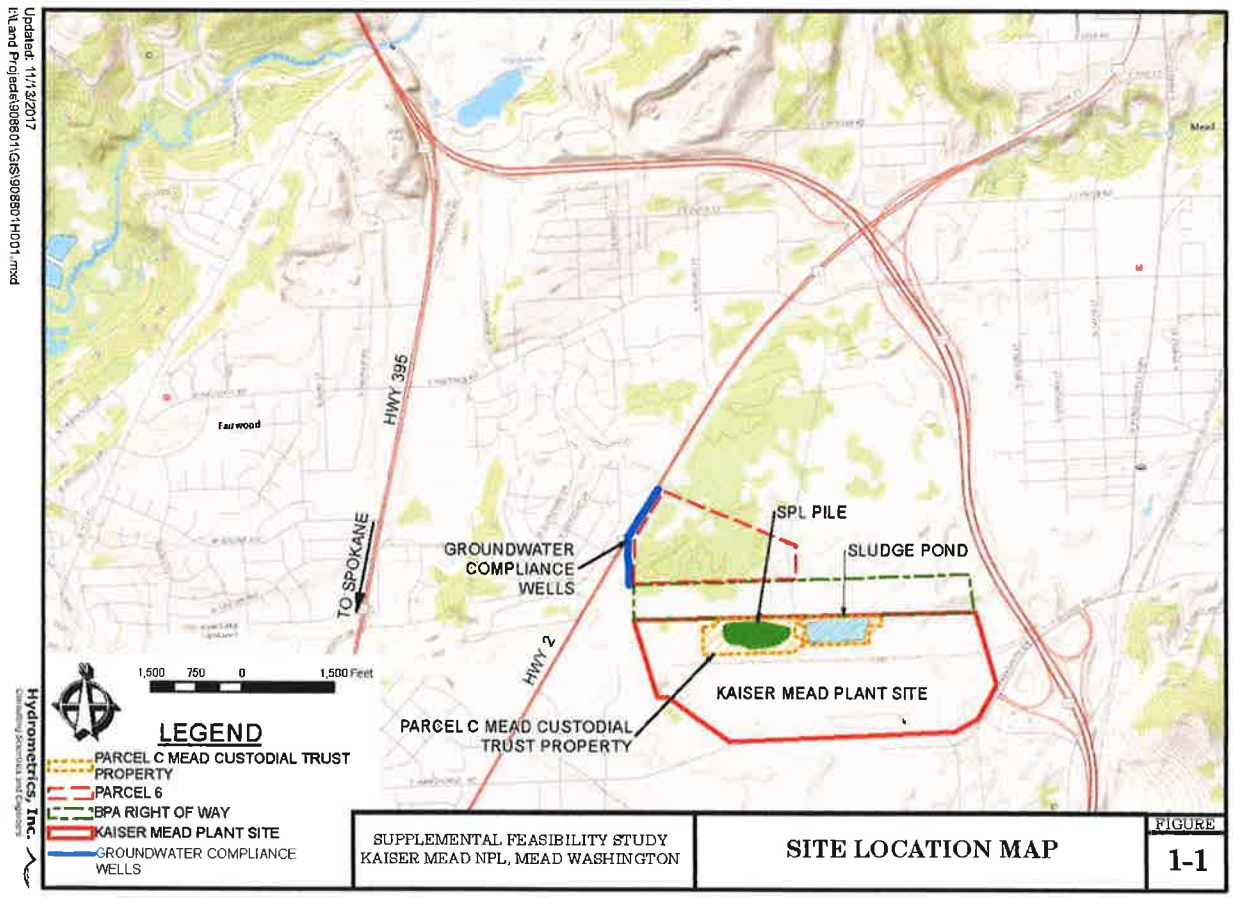
11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The proposal is to construct a "pump and treat" system for remediation of groundwater at the Kaiser Mead NPL Site. This will include the following elements:

- *Installation and operation of approximately 4 to 8 groundwater extraction wells to extract approximately 50 gpm of contaminated groundwater.*
- *Construction of pipelines to convey the pumped groundwater to a water treatment system.*
- *Construction and operation of an approximately 3 acre constructed wetland water treatment system.*
- *Construction and operation of an electrocoagulation water treatment system housed in an approximately 10,000 ft^2 building.*
- *Construction and operation of an approximately 0.25 acre infiltration pond and associated piping for discharge of treated groundwater to the underlying groundwater system.*

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project location is the Kaiser Mead NPL Site located at 2111 E Hawthorne Rd, Mead, WA 99021 within Section 16, Township 26 North, Range 43 East, approximately 7 miles north of Spokane, Washington and 1 mile southwest of Mead, Washington (Figure 1-1).



B. Environmental Elements

1. Earth

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

The site is flat.

b. What is the steepest slope on the site (approximate percent slope)?

Approximately 2 to 4 percent

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Natural soils are fine to medium sand.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No unstable soils are present.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Approximately 3 acres will be graded to construct the wetland treatment system and approximately 0.25 acres for the infiltration pond. The conceptual design is to balance cut and fill to achieve a neutral material balance so that no import or export of fill is required.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion is unlikely and best management practices (BMPs) will be implemented consistent with the State Department of Ecology Stormwater Management Manual for Eastern Washington (Ecology, 2004).

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The area where the constructed wetland and electrocoagulation water treatment systems will be built are currently covered with impervious surfaces (asphalt). Thus, no increase in impervious surfaces is expected.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

As part of engineering design for the project, a SWPP will be developed and BMPs will be implemented consistent with the State Department of Ecology Stormwater Management Manual for Eastern Washington (Ecology, 2004).

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Insignificant amounts of fugitive dust may be generated during excavation and construction. No air emissions would occur during operation and maintenance.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site emissions or odors are expected.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Not applicable.

3. Water

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The closest surface water to the Project is the Little Spokane River, located approximately two miles northwest of the Site.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Not applicable.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Groundwater withdrawn will be treated but will not be used for drinking water or any other beneficial purposes.

Treated groundwater that meets discharge requirements described in Appendix A of the Interim Action Plan will be discharged to groundwater at the approximate rate of 50 gallons per minute. Expected quality of treated water is further described in Table 6-1 of the Interim Action Workplan.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The project will require very limited staffing (1 or less full time employees) for operation of the treatment plant and thus domestic sewage generation will be limited. Handling of domestic sewage will be determined during engineering design and may include a small on-site septic system or the use of temporary holding facilities (e.g., Porta potties).

Treated groundwater that meets discharge requirements described in Appendix A of the Interim Action Plan will be discharged to groundwater at the approximate rate of 50 gallons per minute. Expected quality of treated water is further described in Table 6-1 of the Interim Action Workplan.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Rain falling on the wetland treatment cell will be captured and will not runoff. Pipeline disturbances will be reclaimed with soil and revegetated after construction and will not generate runoff. Roof runoff from the electrocoagulation building will disperse and flow to surrounding areas.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No. Waste materials (sludge) from the water treatment system will be contained, temporarily stored in a roofed and secure area, and shipped off-site to a landfill for disposal.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

As part of engineering design for the project, a SWPP will be developed and BMPs will be implemented consistent with the State Department of Ecology Stormwater Management Manual for Eastern Washington (Ecology, 2004).

4. Plants

a. Check the types of vegetation found on the site:

____deciduous tree: alder, maple, aspen, other
_X__evergreen tree: fir, cedar, pine, other
__X__shrubs
__X__grass
____pasture
____crop or grain
____ Orchards, vineyards or other permanent crops.
____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
____other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Vegetation (primarily grass and possibly trees) may be temporarily removed during well installation, pipeline construction and infiltration pond construction.

c. List threatened and endangered species known to be on or near the site.

The site where the water treatment system will be constructed is a former industrial facility covered with asphalt and no significant vegetation is present. The area where the pipelines and wells will be constructed is a grassy sparse evergreen forest. WA Natural Heritage Program responded to an information request on December 4, 2018 and indicated the following:

> *"We've searched the Natural Heritage Information System for information on significant natural features in your project area. Currently, we have no records for rare plants or rare/high quality ecological communities in the vicinity of your project.*

The information provided by the Washington Natural Heritage Program is based solely on existing information in the database. In the absence of field inventories, we cannot state whether or not a given site contains high quality ecosystems or rare plant species; there may be significant natural features in your study area of which we are not aware." (email from Jasa Holt, WA NHP to Scott Mason, Hydrometrics)

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Not applicable. Primary area of disturbance is currently asphalt within an industrial setting.

e. List all noxious weeds and invasive species known to be on or near the site.

Not applicable. Primary area of disturbance is currently asphalt within an industrial setting.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other _____

The site where the water treatment system will be constructed is a former industrial facility covered with asphalt and no significant wildlife is present or to be expected. The area where the pipelines and wells will be constructed is a grassy sparse evergreen forest where deer and other upland mamals may be present. A search of the US Fish and Wildlife Service "Information for Planning and Consultation" search engine on November 28, 2018 identified the following migratory species that may be present on or near the site: Bald eagle, Cassin's finch, Golden eagle, Lesser yellowlegs, Olive-sided flycatcher, Rufous hummingbird.

b. List any threatened and endangered species known to be on or near the site.

The site where the water treatment system will be constructed is a former industrial facility covered with asphalt and no significant wildlife is present or to be expected. The area where the pipelines and wells will be constructed is a grassy sparse evergreen forest. A search of the US Fish and Wildlife Service "Information for Planning and Consultation" search engine on November 28, 2018 identified the following species that may be present on or near the site:

- *Endangered Species: None.*

- *Threatened species: Yellow-billed Cuckoo (Coccyzus americanus). The project site is outside the critical habitat for this species.*

c. Is the site part of a migration route? If so, explain.

Unknown, but not believed to be.

d. Proposed measures to preserve or enhance wildlife, if any:

None proposed. The site where the water treatment system will be constructed is a former industrial facility covered with asphalt and no significant wildlife is present or to be expected.

e. List any invasive animal species known to be on or near the site.

None known.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Energy will be used in the water treatment system, in heating/cooling the water treatment building, and pumping groundwater. Electricity will be used for pumping and treating water. Gas or electric will be used for heating and cooling the building.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None are proposed at this time but will be evaluated during engineering design as an important cost factor.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

1) Describe any known or possible contamination at the site from present or past uses.

The Site is a state and federal superfund site undergoing cleanup under WA Model Toxics Control Act. Contamination includes cyanide and fluoride contamination of soil and groundwater associated with the former aluminum plant that occupied the site previously.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

The Site is a state and federal superfund site undergoing cleanup under WA Model Toxics Control Act. Contamination includes cyanide and fluoride contamination of soil and groundwater associated with the former aluminum plant that occupied the site previously. Waste contained in the existing engineered on-site containment facility known as the Spent Potliner Pile contains material that may be listed or characterized as dangerous or hazardous waste.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Certain reagents (e.g., sodium hydroxide, calcium chloride, sulfuric acid, anionic or cationic polymers) that might be employed during water treatment may be harmful if mishandled or spilled. Proper engineering controls, PPE and standard operating procedures will be developed for storage, handling and use of potentially harmful chemicals. No existing hazardous chemicals or conditions are known.

The water treatment process will generate approximately 1,000 tons/year of sludge that will contain fluoride and cyanide. The sludge is not expected to have hazardous characteristics but is a listed hazardous waste (K088) as it is derived from spent potliner with is a listed hazardous material.

4) Describe special emergency services that might be required.

None known.

5) Proposed measures to reduce or control environmental health hazards, if any:

The contractor that is hired by MCT will be responsible for preparing a Project and Work Site-specific Health and Safety Plan (HASP) for the interim action. The Contractor will submit the plan to Ecology a minimum of two weeks prior to commencing excavation work at the Site.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction noise will be generated by a variety of construction equipment such as truck engines, generators and other small engines, and earthmoving equipment. Construction noise will be limited to daytime hours and is not expected to create adverse impacts.

3) Proposed measures to reduce or control noise impacts, if any:

Construction activities will be carried out in a manner consistent with Spokane County municipal code and State environmental noise standards.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The Kaiser Mead NPL Site is located on the former Kaiser Aluminum Chemical Corporation smelter complex. The facility was a prebake aluminum smelter that was constructed by the US government during WWII in 1942. The smelter complex covers approximately 240 acres and the area immediately adjacent to the smelter is zoned for heavy industrial use. The nearest residential properties are located approximately 1,500 feet to the northwest of the smelter.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Not applicable.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

c. Describe any structures on the site.

Current structures on the site consists of a capped waste pile, fencing, and a metal-sided building with a footprint of approximately 20' by 40'.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

HI, heavy industrial under the Spokane County Zoning Code.

f. What is the current comprehensive plan designation of the site?

HI, heavy industrial under the Spokane County Zoning Code.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

It is anticipated that 1 to 2 people (0.5 to 1 full time equivalent) will work at the water treatment plant.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

To be determined during engineering design, preliminary estimate of water treatment building is less than 30 feet; exterior to be determined, possibly metal siding.

b. What views in the immediate vicinity would be altered or obstructed?

None.

b. Proposed measures to reduce or control aesthetic impacts, if any:

None.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Minimal, lighting will only be required for security.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Not believed to be likely.

c. What existing off-site sources of light or glare may affect your proposal?

None known.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

None. Site is heavy industrial.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation

None.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

A search of the Spokane City/County Historic Preservation Office online records (http://properties.historicspokane.org) on December 7, 2018 revealed no identified historic properties associated with the Site. The smelter complex itself is over 45 years old. The sole structure on the Trust portion of the complex is an approximately 50' by 120' storage shed of unknown age.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None known.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

No formal assessment performed. The project site is the Kaiser Mead NPL Site located on the former Kaiser Aluminum Chemical Corporation smelter complex. The area is primarily asphalt covered. The Spokane Tribe will be consulted prior to construction to determine the likelihood of potential cultural resources in the project area. An "Inadvertent Discovery Plan" will be prepared for the project that will describe the appropriate measures that will be taken during construction to ensure cultural resources are identified and protected and that appropriate notifications are made.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

See Figure 1-1 above. The Site is bounded by Hawthorne Drive to the South and Highway 2 to the north. Access to the site is from Hawthrone Drive through the Kaiser Mead Plant Site, owned by Spokane Recycling Company.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes, nearest Spokane Transit Authority bus stop is approximately 0.5 miles west of site at corner of Hawthorne Road and Nevada Street.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

To be determined during final engineering design. Based on professional judgement, approximately 2 to 4 trips per day are estimated for water treatment plant staff plus additional occasional trips (1 to 2 times/week) for supplies and deliveries.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

None anticipated.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Circle utilities currently available at the site:
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

All services except septic are currently available on or near the project site.

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

- *Electric and natural gas are available at Hawthorne Road and on the adjacent property and would be provided by Avista. Some extension of services may be required.*
- *Water needs will be determined during engineering design and are expected to be minimal for the 0.5 to 1 full time staff. Water supply may include connection to Spokane municipal system (Whitworth Water District) or the use of bottled water.*
- *No refuse collection is anticipated (staff will transport to landfill as needed).*
- *Telephone service is expected to be provided by wireless service provider.*
- *Sanitary sewer needs will be determined during engineering design and are expected to be minimal for the 0.5 to 1 full time staff. Sewer service may include connection to the Spokane municipal system (available at northwest corner of Site), a small on-site septic system, or the use of a private collection service (e.g., Porta Pottie).*

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee DANIEL J SILVER

Position and Agency/Organization Trustee, Kaiser Mead Custodial Trust

Date Submitted: 2-07-19