CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Brine Spill Reclamation
Proposed Implementation Date:	October 2015
Proponent:	Prima Exploration - RIM Operating, Inc. Ken Read, Operations Manager – Northern Rockies (702) 221-1656
Location:	Section 16 – T36N-R54E (Common School Trust)
County:	Sheridan

I. TYPE AND PURPOSE OF ACTION

This project will be a secondary reclamation for a saltwater spill that occurred in 2013 at the Raymond State 16-15 salt water disposal facility in Section 16 T36N-R54E. The spill covered approximately 2 acres of farmland that was then unable to produce and crops. After the spill, soil samples were taken to determine the extent of the damage. Initial reclamation using DeSalt Plus™ occurred later in 2013. More sampling was conducted in 2014 with the site still unproductive. This remediation plan includes the removal of the contaminated soil and replacing it with soil that will be productive with the surrounding farmland.

II. PROJECT DEVELOPMENT

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

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

State of Montana – Board of Oil & Gas
RIM Operating, Inc. – Operator and Lessee
Prima Exploration – Lessee
State of Montana DNRC- Surface and Mineral Owner. Randy Dirkson, Land Use Specialist, conducted a field review of the site on July 22, 2013.
ARCADIS U.S., Inc. – Contractor for reclamation

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

Prima Exploration and RIM Operating, Inc. are required to follow all other local, state, and federal laws.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: The spill site of approximately 2 acres will remain unreclaimed and the soil will be unable to produce crops do to salt water contamination.

Action Alternative: Rim Operating, Inc. will have permission to reclaim the brine spill site so that this land can be used for production agriculture again in the future. Reclamation will include hauling contaminated soil off site to a permitted disposal site and importing uncontaminated soil with similar characteristics as the native soil in the area.

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.*

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.

Section 16

Soil types for this section include loams and clay loams. The soil type at the site of the spill is a loam.

According to the USDA Web Soil Survey: erosion hazards are low for this soil type, partially due to the lack of slope. Soil degradation susceptibility is low, while restoration potential is high for these soil types.

The parent material for the entire section is composed of Tongue River Member of the Fort Union Formation which can be up to 800 feet deep.

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.

There is a wetland area with a small pond in the SW¼NE¼ of this section. Natural drainages occur throughout the section, some eventually draining to ephemeral Harry's Creek which is 1 mile to the east of this section. The proposed action is not expected to affect groundwater or surface water quality or quantity.

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.

A short duration increase in airborne pollutants and particulates would occur from machinery during remediation and reclamation activities. Minimal short term impacts to air quality are expected.

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.

This area is primarily farmland and most of this section has been tilled with the exception of a few knolls which consist of mixed grass prairie native rangeland.

Access roads exist to all wells and the spill site in the section. Equipment moving to the site should not disrupt any rangeland or farmland productivity.

Currently, approximately 2 acres of soil has been contaminated by a saltwater spill and no crops will grow on the spill site. With this specific remediation and reclamation plan, the contaminated soil will be removed and replaced. Crops will be monitored to ensure production returns to normal standards.

A review in the Natural Heritage Tracker database did not indicate the existence of rare plant species in the area of proposed construction.

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.

A variety of deer, small mammals, raptors, upland game birds and songbirds use this area and activities from the proposed project could temporarily disrupt wildlife movement and patterns. The proposed project should not have any effect on fish or wildlife habitat.

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 was conducted using the Montana Natural Heritage Program database to identify point observations of endangered, threatened, or candidate species within one mile of the proposed activity and no species were found.
A search for the Montana Species of concern within one mile of the proposed activity resulted in no species being found.
No impacts to unique, endangered, fragile or limited environmental resources are anticipated to occur as a result of the proposed action.
This section is not in the Greater Sage Grouse core or general habitat area.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

There are two culturally significant registered sites and one unregistered site in section 16.

Part of the Soo Line Railroad goes through NE¼ of Section 16. Smithsonian site number: 24SH1222.

A medicine wheel, described as a stone circle with cairns, is documented in the SE¼ of Section 16. Smithsonian site number: 24SH0685.

The unregistered site involves 2 cairns also located in the SE¼.

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 spill site is located approximately 6 miles east of Outlook, MT and approximately 8 miles north of Plentywood, MT. This site is in a rural, predominantly farmland area. The spill site is 0.75 miles south from Soo Line Road. Reclamation activities will be short term, and will improve the aesthetics of the area. Reclamation will only during day time hours and some noise is expected during the activity.

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.

None.

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.

None.

IV. IMPACTS ON THE HUMAN POPULATION

- *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.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

No human and health safety risks were identified as a result of the proposed project other than the typical occupational hazards that coincide with reclamation projects.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

The proposed project will improve agriculture production on the spill site, but will not affect industrial or commercial activities in the area.

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.

The proposed project would not create, move, or eliminate jobs.

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.

None.

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.

None.

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.

No known zoning or management plans exist for this area.

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.

None.

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.

None.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

None.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

None.

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 proponent has provided a Site Specific Remediation Plan (Developed by ARCADIS U.S., Inc.) for the spill site which the operator (RIM Operating, Inc.) is responsible for paying.

The existing agriculture leases (2) on the State Section listed above provides approximately $24,687 in annual revenue that goes to Common Schools.

EA Checklist Prepared By:	Name: Heidi Crum	Date: 10/15/15
	Title: Mineral Resource Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

After reviewing the Environmental Assessment, I have selected the Action Alternative, to allow remediation and reclamation activities of the damaged soil. I believe this alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area and help to restore agricultural soil back to generating revenue for the common school trust.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I conclude all identified potential impacts will be mitigated by utilizing the stipulations listed below and no significant impacts will occur as a result of implementing the selected alternative.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

EA Checklist Approved By:	Name: Trevor Taylor	
	Title: Petroleum Engineer	
Signature: Trevor E Taylor		Date: 10/15/15