BISON IV OPERATING, LLC

REMORA OGDP

Waste Management Plan

1.0 Introduction

This document provides site-specific waste management information for the proposed Remora 6 Pad within the Remora OGDP. The information in this document relates specifically to the time during the construction, drilling, completion, production, and interim reclamation of the sixteen (16) proposed horizontal wells on this location.

The proposed location is approximately 0.4 miles north of the intersection of E 6th Ave and Schumaker Road. The Pad will be in the SWNW of Section 6, Township 4 South, Range 63 West, zoned Agricultural within Arapahoe County. An Administrative Use by Special Review will be filed with the Remora OGDP application.

The proposed Pad will be 20.0 acres, reduced to 9.52 acres after interim reclamation. The Pad is on Parcel 1981-00-0-00-244 owned by AJS Management Co LLC. The location is currently used for agriculture.

The proposed production facility equipment for the Remora 6 Pad will be located within the Working Pad Surface adjacent to the wells and will consist of oil tanks, water tanks, vapor recovery towers (VRT), separators, oil polishers, surge vessels, gas lift compressors, vapor recovery units (VRU), oil and water LACTs, scrubbers, blower/oxygen destructors, instrument air skids, gas lift meters, sales gas meters, electrical skids, and emission control devices (ECD).

Phase	Duration (days)	Estimated Start Date
Construction	+/- 35 days	3rd Quarter 2024
Drilling	+/- 104 days	4th Quarter (December) 2024
Completion	+/- 60 days	1st Quarter (March) 2025
Flowback	+/- 10 days	2nd Quarter (May) 2025
Production	Ongoing +/- 30 years	2nd Quarter (June) 2025
Interim Reclamation	+/- 30 days	2nd Quarter (June) 2025*

**or the first favorable weather/growing season.*

2.0 E&P Waste Compliance

This plan is being developed as a requirement of Rule 303.c.(11) and consistent with the requirements of Rule 905.a.(4) as well as local government (Arapahoe County) recommendations. Bison will utilize these general guidelines on all sites at the onset of construction activities as well as perform the necessary management and maintenance throughout the project life. Additional and related information for managing topsoil can be found in Bison's Field Wide Stormwater Management Plan which is updated yearly.

Waste management should be included in the planning process for all projects and activities. Bison personnel are responsible for the proper identification, handling, and storage of waste, both at the facility and throughout the shipment process. Waste can only be disposed of at approved disposal or recycling facilities. Contractors and third parties may not bring any waste materials generated outside field boundaries into Bison facilities for disposal, recycling, or beneficial reuse without prior written approval. Similarly, contractors and third parties must take waste materials generated on Bison facilities off site for disposal. In general, the waste generated by contractors, in the course of performing their work, such as partially empty or empty paint cans, aerosol containers, used oil, chemicals, and blasting material, etc., must be removed and disposed of by the contractor.

All wastes generated on location will be disposed of at a permitted commercial waste facility (see list of current disposal facilities below). Each individual waste stream hauled off location will be accompanied with an approved waste profile and manifest and estimated volume.

Third Party Disposal Facilities and Addresses

Waste Management- Buffalo Ridge Landfill	11655 Weld County Road 59, Keenesburg, CO 80643
North Weld County Landfill	40000 W CR 25 Ault, CO 80610
Denver Regional Landfill	1830 Weld County Rd 6, Erie, CO 80516
Allied Waste	7901 Hwy 85 Commerce City, CO 80022
Tower Landfill	8480 Tower Rd Commerce City, CO 80022
Third Party Injection Facilities	Multiple Locations
High Sierra Injection Facilities	Multiple Locations

3.0 Waste Streams

Water-Based and Oil-Based Drilling Fluids

Bison IV Operating, LLC (Bison) uses both water-based and oil-based fluids for drilling horizontal wells. Bison uses two drilling scenarios with water and oil-based muds. The first consists of drilling the entire borehole with water-based drilling mud. The second consists of using water-based drilling mud only while drilling the surface casing set in the vertical portion of the borehole. Once the surface casing is set, Bison switches to oil-based drilling fluid to complete the remaining lateral borehole. Bison determines the appropriate drilling scenario based on borehole layout, costs, and available equipment. The well is then permitted accordingly depending on the drilling mud type chosen. All wells are drilled using pitless "closed loop" mud handling systems. Drilling fluid is contained in a series of metal tanks associated with the drilling rig and does not contact the ground surface.

The following is a summary of the drilling process when Bison uses both water-based and oil-based drilling mud, while drilling a single borehole. Approximately 200 barrels (bbls) of water-based drilling fluid waste is produced during drilling of the surface casing borehole(s). The water-based drilling fluid is reused for each surface casing borehole on a well pad. After the surface casing installation is completed, the used water-based drilling fluid is transported to a permitted disposal facility via vacuum truck and transport tanker trucks on an as-needed basis. Upon completion of the surface casing borehole(s), Bison will switch to oil-based drilling fluid. Bison will use oil-based drilling fluid to drill the remaining lateral borehole(s). Oil-based drilling fluid can be recycled much longer than water-based drilling fluid. Spent drilling fluids/muds are collected upon completion of the drilling phase into vac trucks for disposal. Drilling muds are stored in the recirculating equipment during the transport phase for less than 24 hours. The oil-based drilling fluid is transported to the next drilling location and reused. All water-based drilling fluid is transported to permitted disposal facilities under waste manifest to ensure chain of custody control.

Expected volumes and Frequency of loading: Water-Based Drilling Fluids

Daily Volume	Frequency of Disposal	Phase(s) of Generation	Duration of Waste Stream
200 bbl	Once per Pad	Surface Hole Drilling	1 Day/well

Expected volumes and Frequency of loading: Oil-Based Drilling Fluid

Daily Volume	Frequency of Disposal	Phase(s) of Generation	Duration of Waste Stream
150 bbl	N/A – all oil-based fluids are recycled	Drilling Production Hole	5 Days/Well

Drill Cuttings

Approximately 225 tons/day of water-based drill cuttings and 130 tons/day of oil-based drill cuttings are expected during drilling of the Remora wells. The wells are drilled using pitless "closed loop" mud handling systems. Drill cuttings are mechanically separated and stored in metal roll-off containers. The cuttings are transferred from the roll-off container to a transport truck and hauled to a permitted disposal facility. Drill cuttings are transported to permitted disposal facilities under waste manifest to ensure chain of custody control.

Expected volumes and Frequency of loading: Water-Based Drill Cuttings

Daily Volume	Frequency of Disposal	Phase(s) of Generation	Duration of Waste Stream
225 Tons	10 Loads/Day	Drilling of Surface Hole	1 Day/Well

Expected volumes and Frequency of loading: Oil-based Drill Cuttings

Daily Volume	Frequency of Disposal	Phase(s) of Generation	Duration of Waste Stream
130 Tons	6 Loads/Day	Drilling Production Hole	5 Days/Well

Flowback Fluid

During well stimulation, water is injected into the formation. After the conclusion of completions activity, the injected water and formation fluid are temporarily produced by the well (flowback fluid) and diverted to onsite tanks and temporarily stored onsite. Flowback and Workover Fluid wastes will be stored in a container that is compatible with the waste. The waste storage location will have proper containment in the case of a spill, and be protected from run-off or storm drains, to comply with Spill Prevention, Control, and Countermeasure (SPCC) regulations. Flowback and Workover Fluid wastes will be stored for no more than 24 hours onsite. During active drilling, hauling operates 12 hours per day to ensure adequate storage in tanks. Recovered flowback fluids are then transported to a permitted water recycling/disposal facility via vacuum truck, transport tanker truck, or gathering line. Flowback water is transported to permitted recycling/disposal facilities via gathering line or under transport waste manifest to ensure chain of custody control.

Expected volumes and Frequency of loading: Flowback Fluid

Daily Volume	Frequency of Disposal	Phase(s) of Generation	Duration of Waste Stream
1000 bbl/Well	Daily	Flowback - Completions	6 days/well

Produced Water

Water produced from an operating Wattenberg Field horizontal well is separated from other produced fluids via a three-phase separator and diverted to a cement, fiberglass, or steel produced water storage vessel. Produced water storage tanks are emptied on a routine basis and the produced water is transported to a permitted water recycling/disposal facility via vacuum truck or transport tanker truck. Produced water is transported to a permitted recycling/disposal facility under waste manifest to ensure chain of custody control. On a limited number of locations produced water is piped directly to the permitted water recycling/disposal facility via Bison pipeline.

Expected volumes and Frequency of loading:

Daily Volume	Frequency of Disposal	Phase(s) of Generation	Duration of Waste Stream
50 bbl/Well	Daily	Production	Life of wells

Tank Bottoms

Liquid wastes consisting of Sand/Bacteria/Water, resulting from cleaning an oil production tank or produced water tank are transferred via hydro-vac truck to a permitted water recycling/disposal facility via vacuum truck or transport tanker truck. Solid wastes at the bottom of oil production tanks and produced water tanks including, but not limited to, sand, sludge, and other solids are transported to a permitted disposal facility via transport truck. Tank bottoms will be allowed to accumulate in the tank or vessel until operation requirements necessitate removal. The tank bottom waste will be stored onsite. Tank bottoms will be sent off site after receipt of laboratory analysis that indicates TENORM is not present. The waste will be sent to a disposal facility that is licensed to accept E&P wastes that can contain hydrocarbons or possible benzene contamination. Liquid and solid waste is transported to permitted recycling/disposal facilities under waste manifest to ensure chain of custody control.

Expected volumes and Frequency of loading:

Daily Volume	Frequency of Disposal	Phase(s) of Generation	Duration of Waste Stream
As needed	As needed	Production	Life of wells

Impacted Soil Storage/Disposal

General housekeeping of production facilities, including cleanup of limited drips and spills may generate small quantities of (E&P) exempt impacted soil and/or gravel. This includes soil or gravel from secondary containment. Bison may install small, centralized storage/disposal locations throughout the operations area for organized disposal of this waste. The covered waste containers are emptied on an as needed basis. The impacted soil/gravel is transported to a permitted disposal facility under waste manifest to ensure chain of custody control. Storage/disposal is only related to housekeeping activities and is not meant for large release cleanup or remediation.

Oily Trash

During operations and maintenance of production facilities, various types of exploration and production (E&P) exempt trash are generated. This includes oily gloves, rags, absorbent pads, rod packing, and spent bags filters. These items are used in the maintenance of E&P exempt oil and produced water process equipment. Bison has installed centralized disposal locations throughout the operations area for disposal of this waste. The covered waste containers are emptied on an as needed basis. The oily trash is transported to a permitted disposal facility under waste manifest to ensure chain of custody control.

Expected volumes and Frequency of loading:

Daily Volume	Frequency of Disposal	Phase(s) of Generation	Duration of Waste Stream
As needed	As needed	All Phases	Life of wells

4.0 Recycling and Reuse Plan

Bison understand the importance of utilizing available resources to the fullest extent. This includes reuse and recycling efforts of E&P waste products on future oil and gas development projects. Where practical, Bison will seek to use flowback and or produced water fluids as a source for new well stimulation operations. Bison will identify if a recycling and Reuse Plan is valid on any specific project and submit a written management plan with the applicable Form 4, Form 15 or Form 28, as required. This plan, when applicable, will also be consistent with Bison's site-specific Water Management Plan.

5.0 Recordkeeping system

Licensed third-party transporters will provide load tickets with the following information:

- The date of the transport
- The identity of the waste generator
- The identity of the waste transporter
- The location of the waste pickup site
- The type and volume of waste
- The name and location of the treatment or disposal site.

A manifest specific to the disposal site will be filled out after the waste is loaded. A Bison representative will sign the manifest and take a copy before the waste leaves location. The manifest will be brought to the disposal site and signed by a disposal site representative and transporter. Both the load ticket and waste manifest will be stored by Bison for 5 years in accordance to 905.b.(3).

6.0 Spill Response and Remediation

Occasionally, spills of productions fluids may occur during oil and gas operations that result in localized impacts to soils on or near the facility. All reportable spills are immediately investigated by Clean Harbors Environmental and Bison personnel. Impacted soils are assessed to determine if they exceed regulatory cleanup standards and require removal, treatment, or disposal. Characterizing potentially contaminated soils is accomplished by field-screening the impacted soils to determine relative hydrocarbon concentrations, and/or by collecting samples of the impacted soils and sending the samples to an approved commercial lab for analysis per applicable Table 915-1 constituents. All contaminated soils exceeding regulatory cleanup standards are excavated and managed/disposed of appropriately. If a spill incident is subject to agency reporting requirements, the appropriate agencies are notified within the regulatory timelines. Impacted soils that exceed applicable cleanup standards are typically excavated and taken to an off-site commercial disposal facility that is authorized to accept that type of waste.

7.0 Facility Decommissioning

Oil and Gas Facility closure will be pursuant to Rule 911.a at the time of final site closure, Plugging and Abandonment, or decommissioning, unless the Director determines that a substantive change to the site requires a Form 27, or a reportable Spill or an historic impact is discovered during facility operation or removal.

8.0 Plugging and Abandonment

Waste produced during the plugging and abandonment (P&A) phase include drilling mud circulated out of annulus and cement brought back to surface during plugging activities. An estimate of expected volumes or amounts of waste generated, and a frequency and duration of the waste stream generation during P&A are as follows:

- Drilling mud – 80 bbls per well, disposed as each well is plugged for the duration of plugging activities.
- Cement water – 120 bbls per well, disposed as each well is plugged for the duration of plugging activities.

9.0 Evaluation of applicable surface owner and lease agreement conditions

N/A.

10.0 Contingency Plan

The contingency plan for contaminated soil will be to remediate and dispose of according to Rules 905, 912, 913 and 915. All contaminated soils exceeding regulatory clean-up standards are excavated and managed/disposed by immediate transfer to an off-site commercial disposal facility that is authorized to accept that type of waste. If any incident is subject to agency reporting requirements, the appropriate agencies are notified within the regulatory timelines.

11.0 Best Management Practices

Standard

- Inspections: Conduct inspections and preventative maintenance on flow lines, storage tanks, and other E&P production equipment; use proper containers, keep lids on containers, and store containers properly to prevent overflow or spillage; maintain secondary containment for recovery of spills; and review SPCC Plans if applicable.

- Manifests: All drill cuttings generated during drilling operations are transported offsite with proper manifesting for disposal at facilities properly permitted to receive E&P waste.

- Sampling/Disposal/Inspections: Prior to transporting of the waste, Bison will ensure that a waste profile is on file with the disposal company or will characterize the waste for profiling. When the waste is sent for disposal, the waste will be identified on the waste shipping manifest. Any associated sampling data, inspection results, and/or SDS information will be kept with the waste profile documentation. Unforeseen wastes not listed in the Waste Stream table will be stored and disposed of in accordance with all regulations applicable to the specific waste.

- Hydrocarbon odors from production facilities are minimized and eliminated by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors. All tanks will be sealed with thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.

- A temporary impermeable synthetic or geosynthetic liner with foam type berms will be utilized under the drilling rig, mud tanks, shakers, and drill cuttings bins.

- Bison will not bury or burn trash or other waste materials at an oil and gas location.

- All load lines shall be bull plugged or capped.

- Secondary containment berms shall be constructed of steel rings or walls with a synthetic or engineered liner.

- All liner seams will be welded and tested in accordance with applicable ASTM international standards.

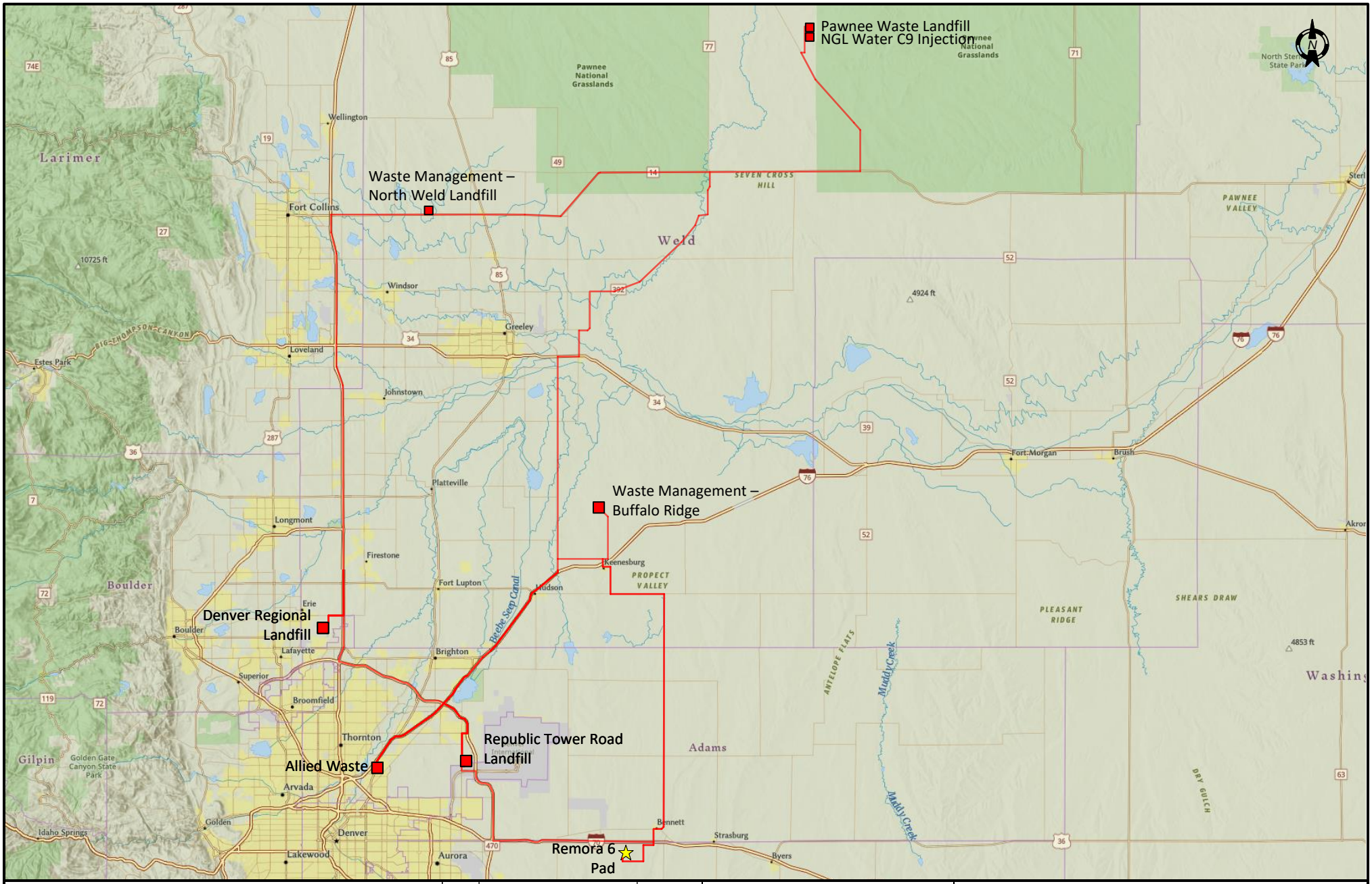
- Trash receptacles will be designed, maintained, and operated to exclude wildlife, and to protect public safety, the environment, and wildlife from exposure to overflowing, leak prone, or insecure trash receptacles.

Attachments

Waste Summary Table
Waste Disposal Locations

Waste Streams for Remora Location (16 wells)

Waste Stream	Operational Phase	Regulatory Classification	General Description	Estimated Volume (daily)	Frequency of Disposal	Duration of Waste Stream	Potential Hazard	Lab Analysis Required for any Physical or Chemical Hazards	Method of Storage	Method of treatment (If applicable)	Method of Disposal
General Trash	Construction/ Drilling/ Completions	Non-E&P Waste	Trash consists of any unused equipment, junk, or man-made non-E&P, non-hazardous waste.	Varies	Weekly	3 weeks	None	No	Roll off dumpster	N/A	Commercial Disposal
Porta Potty Waste	Construction/ Drilling/ Completions/ Production	Non-E&P Waste	Human generated porta potty waste.	60-70 gallons/toilet	Weekly	Life of wells	Biological	No	Porta Potty Tank(s)	N/A	Commercial Disposal
Drill Cuttings	Drilling	E&P Exempt Waste	Small pieces of rock and soil (including spall and carvings) that break away from the well walls during drilling and are screened out of the liquid mud system.	225 tons water-based drill cuttings 130 tons/day oil-based drill cuttings	10 loads/day 6 loads/day	1 day per well 5 days per well	Ignitable/ Combustible, Toxic	No	High wall containment	N/A	Commercial Disposal
Drilling Fluids	Drilling	E&P Exempt Waste	Used to lubricate and remove drill cuttings during the drilling process. Drilling fluids are processed to remove solids and recirculated.	350 bbls	Recycled and once per pad	5 days per well	Ignitable/ Combustible, Toxic	No	Storage tanks	N/A	Commercial Disposal
Flowback Fluid and Water	Completions	E&P Exempt Waste	Sand and other small solids separated from flowback fluids. Used flowback and workover fluids, muds, completion, treatment, stimulation, and packing fluid, swabbing and bailing wastes, and pipe dope from well development and workover.	1000 bbls/ per well	Daily	6 days per well	Ignitable/ Combustible, Toxic	No	Sealed tank	N/A	Commercial Disposal
Produced Water	Production	E&P Exempt Waste	Water (brine) brought up from the hydrocarbon bearing strata during the extraction of oil and gas. It may include formation water, water that has been injected into the formation and any chemicals added down hole or during the oil/water separation process.	50 bbls/per well	Daily	Life of wells	Ignitable/ Combustible, Toxic	No	Sealed tank	N/A	Commercial Disposal
Basic Sediment and Water	Production	E&P Exempt Waste	BS&W usually consists of water, paraffin, sand, scale, rust, and other sediments.	Varies	As needed	Life of wells	Ignitable/ Combustible, Toxic	No	Tank	N/A	Commercial Disposal
Tank Bottoms	Production/ Facility Decommissioning	E&P Exempt Waste	Tank and vessel bottoms include basic sediment and water (BS&W), heavy hydrocarbons, solid sands and emulsions, which settle in the bottom of storage tanks and/or treating vessels.	Varies	Bi-weekly	Life of wells	Ignitable/ Combustible, Toxic	No	Tank	N/A	Commercial Disposal
Oily Waste	Spill Response and Remediation/ Facility Decommissioning/ Plugging and Abandonment	E&P Waste Non-Exempt	Soil that has been impacted with crude oil, condensate, produced water, or any other E&P waste.	Varies	As needed	Life of wells	Ignitable/ Combustible, Toxic	As needed	N/A; Trucked to approved waste site	Media will be characterized/ screened, removed, and disposed of in compliance with remediation practices required by 900-Series Rules.	Commercial Disposal
Drilling Mud	Plugging and Abandonment	E&P Exempt Waste	Drilling mud circulated out of annulus during plugging.	80 bbls/well	As each well is plugged	Duration of abandonment of each well	Toxic	No	Tank	N/A	Commercial Disposal
Cement Water	Plugging and Abandonment	E&P Exempt Waste	Cement returns brought back to surface during plugging.	120 bbls/well	As each well is plugged	Duration of abandonment of each well	None	No	Tank	N/A	Commercial Disposal



LEGEND

- Remora 6 Pad
- Waste Disposal Location
- County Boundary
- Disposal Route

REV	DESCRIPTION	DATE
1	Issued for Reference	9/28/23
2	Update	9/29/23
3	Haul Route	3/20/24

BISON IV OPERATING

BISON IV OPERATING, LLC

DISPOSAL LOCATIONS

REMORA 6 PAD

SWNW Section 6 T4S R63W, 6th P.M.

ARAPAHOE COUNTY, CO