CCR 0994-23-02 Well Pad

Waste Management Plan
ECMC Rule 304.c.(11)

Laramie Energy, LLC
3199 D Rd. Bldg A2
Grand Junction, CO 81504

1. INTRODUCTION

The following Waste Management Plan addresses the requirements of Colorado Energy and Carbon Management Commission (referred to hereinafter as ECMC or the Commission) Rule 304.c.(11) *Waste Management Plan* as part of the Form 2A Location Assessment Permit Application of the 300 Series of the Commission's rules. Laramie's Waste Management Plan was developed in accordance with ECMC Rule 905.a.(4). and ECMC Waste Management Plan Guidance (September 15, 2021).

2. WASTE MANAGEMENT PLAN – CCR 0994-23-02 WELL PAD

The purpose of the CCR Waste Management Plan (WMP) is to provide a systemic approach to management waste generated at the CCR (Colorado Canyon Ranch) 0994-23-02 well pad (CCR Pad) during operations. Compliance with environmental regulations reduces the company's operating costs and minimizes potential impacts. It is essential for all Laramie Energy personnel and contractors to properly manage, and record waste generated in Laramie's North Vega operations area.

2.1. PROPOSED OPERATIONS – CCR 0994-23-02

The CCR Pad is a proposed new location in Mesa County, Colorado. Laramie is proposing to drill two (2) new horizontal wells at the CCR Pad in Section 23 of Township 9 South, Range 94 West, 6th P.M. The CCR Pad will develop fee and federal minerals. The site will operate in accordance with applicable local, state, and Federal regulations.

The site's location is within Laramie's North Vega operations area and will be tied into to existing infrastructure to minimize traffic impacts and surface disturbance. Laramie operates support facilities in the area that will accommodate operations at the CCR Pad. The CCR Pad is located on private property in which Laramie has established a Surface Use Agreement (SUA) to construct a well pad, access road, and pipeline segment.

Laramie will utilize a closed-loop drilling system at the CCR Pad. Water-based bentonite drilling fluids and oil-based drilling fluids will be utilized for the two (2) new horizontal natural gas wells. Water-based bentonite drilling fluids will be used for the vertical section of the well and oil-based drilling fluids will be used for the horizontal portion.

OGDP Title: 2024 CCR 0994-23-02 OGDP
Location Name: CCR 0994-23-02
Location ID Number: New Location

2.2. LOCATION

The well pad is located 6 mapped miles and 6.5 access (travel) miles east of Collbran, Colorado. The CCR Pad is located approximately 1,560 feet west (mapped distance) from the nearest public road, 64 3/10 Road (Mesa County Public Road – also known as Brush Creek Road).

Legal Description: NWNE of Section 23, Township 9 South, Range 94 West, 6th P.M.
Location Coordinates: Latitude: 39.268132°; Longitude: -107.847692°
Elevation: 7142 feet
County: Mesa
General Location: 6 mapped miles east of Collbran, Colorado.
Zone District: Agricultural, Forestry, Transitional District (AFT)

2.3. ASSOCIATED PLANS

Plans that are associated with management of waste for the CCR are listed below. Please consult these plans prior to handling, transporting, manifesting and disposing of waste.

- CCR Water Plan
- CCR Stormwater Management Plan
- Collbran Master Stormwater Management Plan
- Spill Prevention Control and Countermeasure Plan: Western Colorado Facilities

3. WASTE IDENTIFICATION AND CLASSIFICATION

The following section addresses how to properly identify and classify wastes that may occur at the CCR Pad.

The EPA regulates household, industrial, and manufacturing solid and hazardous wastes under the Resource Conservation and Recovery Act (RCRA). The EPA classifies waste into two main categories: Hazardous Waste and Non-Hazardous Waste/Solid Waste. The EPA defines subcategories for each type of waste. Common classifications of waste, based on the source of generation, are stated below:

1) Industrial Solid Waste;
2) Domestic Solid Waste; and
3) Oil and Gas Exploration & Production (E&P) Waste.

3.1. INDUSTRIAL SOLID WASTE

Industrial solid wastes are wastes that are generated by industrial processes. Industrial solid waste can be found in a solid, liquid or gaseous form. Examples of industrial solid waste generated include non-friable asbestos, cleaning solutions, solvents or degreasers, absorbent media, filters, filter media, and/or some empty chemical containers.

Waste associated with down hole oil and gas exploration and production activities are excluded from Industrial Waste category. Excess cement which has not been used downhole will be classified as Industrial waste. Excess cement will not be buried onsite and will be disposed of at an approved third-party waste disposal facility (**Appendix A**).

3.2. DOMESTIC SOLID WASTE

Examples of municipal waste include office trash, paper, food waste and rubbish. Sewage is also classified as municipal/domestic solid waste unless contaminated with hazardous

materials. Sewage includes both grey water and septic waste generated at office buildings, drilling rigs, galleys, and living quarters.

Laramie anticipates municipal solid waste to be generated from the activities associated with the CCR Pad are domestic refuse. Domestic refuse may be disposed of at the Mesa County Landfill and the Garfield County Landfill.

3.3. OIL AND GAS EXPLORATION & PRODUCTION (E&P) WASTE

Colorado Revised Statute (C.R.S.) § 34-60-103 defines Exploration and Production (E&P) Waste as:

"*Exploration and production waste" means those wastes that are generated during the drilling of and production from oil and gas wells or during primary field operations and that are exempt from regulation as hazardous wastes under subtitle c of the federal "Resource Conservation and Recovery Act of 1976", 42 U.S.C. sec. 6901 to 6934, as amended."*

E&P waste includes, but not limited to: flowback fluids, produced water, drilling fluids, oily waste, drill cuttings, and tank bottoms. Spilled or released product (crude oil or condensate) at primary field exploration operations and production facilities are also considered E&P waste.

A list of exempt and non-exempt oilfield wastes that may be generated at the CCR Pad are provided in **Appendices B & C**.

4. WASTE REDUCTION AND MINIMIZATION

Whenever feasible, Laramie will strive to minimize and reduce waste. Waste minimization and reduction efforts can be achieved by:

- Re-use of waste as part of makeup constituents
    - Use of recycled produced water for well completions
    - Re-use of erosion and stormwater controls to prevent waste
- Good housekeeping
    - Bear-proof waste containers
    - Ensuring that contractors remove their own wastes
    - Proper labeling of containers
    - Avoiding commingling waste streams
- Reduction of waste
    - Use of closed drilling systems to reduce the volume of drilling waste
    - Using bulk containers rather than drums
    - Unused chemicals will be transported to another site or will be sent back to the chemical provider company
    - Proper equipment maintenance and replacement
    - Communication with subcontractors on waste minimization practices

For non-hazardous waste, Laramie employs the EPA's Waste Management Hierarchy as shown below.

Sustainable Materials Management: Non-Hazardous Materials and Waste Management Hierarchy | Sustainable Materials Management | US EPA

5. WASTE DISPOSAL

Laramie employs the EPA's Waste Management Hierarchy to reuse, recycle, and minimize waste. Waste disposal will occur when waste generation cannot be prevented or avoided. The following disposal methods may be used to properly dispose of waste generated at the CCR Pad:

- Underground injection control well
- Approved offsite third-party disposal facilities

5.1. UNDERGROUND INJECTION CONTROL WELL

Unused produced water will be disposed of at one of Laramie's approved UIC Disposal Wells. Four permitted injection wells are detailed below.

LARAMIE OPERATED INJECTION WELLS		
WELL NAME	**UIC FACILITY ID**	**LEGAL DESCRIPTION**
Currier /1-13 (BK1) SWD	160026	NESW Section 1 T9S R93W
Buzzard Creek Unit 12-4	159355	NWNW Section 12 T9S R93W
Vega Unit 34-13D	159294	SENE Section 33 T9S R93W
ZIEGAL 7-1 SWD	159172	SENE Section 7 T10S R94W

5.2. APPROVED OFFSITE THIRD-PARTY DISPOSAL FACILITIES

A list of approved third-party disposal facilities is provided in **Appendix A**. If offsite disposal must occur, all material will be transported and disposed of by manifest for tracking records. All material that will be disposed of will have proper characterization for acceptance at approved disposal facility. Please confirm waste characterization and waste profile prior to disposal.

5.2.1. DRILL CUTTINGS

Water-based and oil-based drilling muds will be used to drill wells at the proposed Location. Water-based drilling fluids will be used for the surface casing (vertical depth) and oil-based muds will be utilized for the horizontal segments. While both types of drilling muds will be used during drilling, Laramie will consider all drilling cuttings generated at

the CCR Pad will be considered to be oil-based drill cuttings or "oily waste". Per ECMC Rule 905.e(1) *Oily Waste*, oil-based drill cuttings generated at the CCR Pad will be disposed of at a commercial Solid Waste Disposal facility in accordance with ECMC Rule 905.e.(1).A.

As drill cuttings are brought to the surface, they will be run through screened shakers then processed through a centrifuge to remove additional liquids. Finally, the cuttings will be stored in open top containers and removed for disposal via trucking. If needed, sawdust, wood pellets, or another acceptable, inert material may be mixed with the cuttings to remove excess moisture to prepare cuttings for transportation and prior to disposal.

Drill cuttings (oily waste) will not be stored on ground/pad surface. Drill cuttings will be stored in two (2) three-sided high wall tanks for a total onsite storage capacity of 125 cubic yards. For wells to be drilled at the CCR Pad the estimated volume of drill cuttings generated per well at this location is approximately 540 cubic yards, which consists of 320 cubic yards of water-based cuttings and 220 cubic yards of oil-based cuttings. Total volume of drill cuttings to be generated for the two (2) horizontal wells is estimated at approximately 1,080 cy. All drill cuttings will be hauled to an approved third-party commercial facility for disposal. For disposal, approximately 80 trucks will be required to haul cuttings, resulting in 160 truck trips.

5.2.2. PROPPANT

During completions activities, frac sand (proppant) will be utilized. Approximately 20,000,000 pounds of proppant will be required for the hydraulic fracturing per well, resulting in a total of 40,000,000 pounds of proppant for the two horizontal wells Onsite storage of proppant will consist of a 6-pack of silos that will hold 2,500,000 pounds of proppant. Delivering of the proppant will result in approximately 864 trucks (1,728 vehicular trips) to the site.

Returned frac sand will be separated into a sand tank (400 bbl.). Laramie anticipates less than 2% of frac sand will be returned (approximately 148 cubic yards). A vac truck will collect returned sand from the sand tank, 1-2 times a month. Returned frac sand will be hauled off-site to an approved third-party commercial disposal facility.

6. WASTE HANDLING AND STORAGE

Proper handling and storage of waste will occur at all Laramie operated facilities. Waste handling and storage must adhere to state and federal regulations to maintain compliance. Appropriate handling and storage of waste is essential for the safety of personnel, public welfare and the environment.

The following guidelines identify proper waste handling and storage practices to be employed by personnel:

- The proper personal protective equipment (PPE) should always be worn when handling waste.

- Implement good housekeeping measures to minimally impact the operating area and maintain a well-kept appearance at all company facilities.
- Waste should always be segregated and stored according to its waste classification. Never mix exempt or non-hazardous wastes with hazardous wastes which may result in a reclassification of the waste.
- A designated storage area should be established for waste storage.

7. WASTE TRACKING AND RECORDS MANAGEMENT

In compliance with ECMC Rule 907.b.(8).F. *Record-keeping*, waste that is transported from the North Vega operations area and transported on public roads will be documented. Records of the source(s) and the destination will be documented. Per ECMC Rule 907.b.(2), the following information will be kept on file for at least five years and will be made available upon request:

A. The date of the transport
B. The identity of the waste generator
C. The identity of the waste transporter
D. The location of the waste pickup site
E. The type and volume of waste
F. The name and location of the treatment or disposal site

Laramie will retain records at the field office located in Grand Junction. Maintenance records, analytical results, field notes, stormwater and weed inspections, records of receiving, treatment, and transportation will be maintained by Laramie. Physical and/or digital records will be kept in proprietary, for a minimum of 5 years. Documents and records may be made available to ECMC upon request.

8. WASTE TRANSPORTATION

All transportation efforts to approved disposal facility will be documented and tracked for final burial and/or disposal location. If any spills occur during transportation, the ECMC will be notified, and a Form 19 will be submitted to document release.

Wastes which will be transported off-site are identified by waste stream in **Appendices B & C.** Waste material that is hauled from the CCR Pad will be transported accessing private and public roads.

The nearest public road intersection is Mesa County Road 64 3/10 (64 3/10 Rd) (also known as Brush Creek Road) and HWY 330. The nearest public road is 64 3/10 Rd , which is 2,542 feet (access /travel distance) from the CCR Pad. A driveway permit is required since the well pad will be accessed from 64 3/10 Rd. KLJ Engineering (contractor) submitted a driveway permit to Mesa County on July 10th, 2024. On August 20, 2024, Mesa County issued the driveway permit (Access Permit #: DW24-0139).

Vehicles transporting waste off-site will travel on the following haul route. The Haul Route Map is provided in **Appendix G**.

- Vehicles will leave the well pad via the access road in a western & southern direction for 2,542 feet.
- Vehicles travel on the access road (private surface) until reaching where the access road terminates at 64 3/10 Rd (public road.) (Access Road driveway entrance coordinates - Lat: 39.266527; Long: -107.854687).
- Vehicles will turn left (south) onto 64 3/10 Rd and proceed south for 950 feet until reaching an intersection of HWY 330, where 64 3/10 Rd terminates.
- Traffic will turn right onto HWY 330 and head west.
- Vehicles will turn left (west) onto HWY 330E (public road).
- Vehicles will travel west towards Collbran, CO, on what is commonly referred to as CR/HWY 330E for approximately 6.5 access miles.
- Vehicles will continue to either Mesa County Road 45.5 or Highway 65, depending on the location of the disposal facility.

9. WASTE BEST MANAGEMENT PRACTICES (BMPS)

- Whenever feasible, Laramie will strive to minimization and reduce waste
- Erosion and stormwater control features will be re-used when possible.
- Reduction of waste by use of closed drilling systems to reduce the volume of drilling waste.
- Reduction of waste by use using bulk containers rather than drums.
- Unused chemicals will be transported to another site or will be sent back to the chemical provider company.
- Proper equipment maintenance and replacement.
- Communication with subcontractors on waste minimization practices.
- The proper personal protective equipment (PPE) will always be worn when handling waste.
- Implement good housekeeping measures to minimally impact the operating area and maintain a well-kept appearance at all company facilities.

LIST OF APPENDICES	
APPENDIX A	Approved Waste Disposal Facilities
APPENDIX B	Waste Stream Table
APPENDIX C	Waste List and Waste Management Guides
APPENDIX D	Haul Route Map

APPENDIX A

APPROVED THIRD-PARTY WASTE DISPOSAL FACILITIES		
Disposal Facility	**Address**	**Contact**
Mesa County Landfill	3071 U.S. Highway 50 Grand Junction, CO 81503	(970) 241-6846 – Phone (970) 242-7467 – Fax https://www.mesacounty.us/swm/
Garfield County Landfill	0075 County Rd 246 Rifle, CO 81650	970-625-2516 – phone 970-625-1490 – fax https://www.garfield-county.com/landfill/
Greenleaf Environmental Services	15655 45 1/2 Road De Beque, CO, 81630	(970) 283-8992 https://www.greenlfservices.com/
ECDC Environmental Landfill	1111 West Highway 123 East Carbon, UT 84520	(435) 888-4113
Safety Kleen	368 Bonny Street Grand Junction, CO 81501	(970) 241-1343 https://www.safety-kleen.com/locations

APPENDIX B

WASTE STREAMS PER OPERATIONS					
OPERATIONAL PHASE	**WASTE STREAM**	**DISPOSAL TYPE**	**CONTAINERS**	**VOLUME**	**FREQUENCY**
Construction Phase	Septic Waste	**Disposal –** Vendor who provides portable toilet will have an established contractor with sewage disposal facilities and/or waste treatment facility.	Portable Toilets	300 gallons days	Once a week
Drilling	Drilling Mud Solids and Cuttings (Only residual mud on surface of cuttings)	**Disposal** – Refer to Attachment C for waste characterization and disposal details	Two (2) three-sided high wall tanks or a total onsite storage capacity of 125 cubic yards.	1,080 Cubic Yards Total for Well Pad	As drill cuttings are brought to the surface, they will be run through screened shakers then processed through a centrifuge to remove additional liquids. Finally, the cuttings will be stored in containers removed for disposal. If needed, sawdust, wood pellets, or another acceptable, inert material may be mixed with the cuttings to remove excess moisture to prepare cuttings for transportation and prior to disposal.
	Drilling Mud Solids Separate from Cuttings during shaker / centrifuge process	**Recycled and reused:** For drilling operations at CCR Pad. **Disposal** - Refer to Attachment C for waste characterization and disposal details	**Reused:** Drilling Mud Solids to be reused will be contained in mud tanks. **Disposed -** mud tanks until hauled to disposal in a tanker transport truck.	If Laramie does not utilize for subsequent drilling, disposal volume is anticipated at 400-500 barrels after drilling operations are completed.	If disposed, drilling mud will be disposed of once drilling operations are completed.
	Drilling Fluid/Mud	**Disposal and Recycling** - Refer to Attachment C for waste characterization and disposal details			
	Domestic Refuse	**Disposal** – Mesa County Landfill	Bear-proof waste containers	400-800 gallons of garbage per week during drilling operations	During drilling, containers will be emptied by the contractor 1-2 times weekly. Collection and disposal frequency may fluctuate depending on need.
	Excess Cement (Both Cement Returns and Excess Cement Not Use Downhole)	**Disposal -** Refer to Attachment C for waste characterization and disposal details	Leak-proof metal bins. Typically roll-off containers approximately 8-10 cubic yards	Less than 1 cubic yard	1-2 haul trips once drilling operations are completed.
	Septic Waste	**Disposal –** Vendor who provides portable toilet will have an established contractor with sewage disposal facilities and/or waste treatment facility.	Portable and/or Portable Above Ground Sewage Tanks	500-1500 gallons a day	1-3 times weekly
Completions	Domestic Refuse	**Disposal** – Mesa County Landfill	Bear-proof waste containers	300 gallons	During completions, containers will be emptied by the contractor weekly. Collection and disposal frequency may fluctuate depending on need.
	Septic Waste (For Completions & Flowback)	**Disposal –** Vendor who provides portable toilet will have an established contractor with sewage disposal facilities and/or waste treatment facility.	Portable Toilets	300 gallons days	Once a week
Flowback	Produced Water and Flowback Water	**Recycling and Disposal**- Refer to Attachment C for waste characterization and disposal details.	550 Barrel Frac tanks and water gathering line infrastructure	Approximately 110,000 bbl. of flowback water will be generated per well.	Produced water and flowback water will be transferred to Laramie's Water Treatment Facility via new and existing water lines.
	Domestic Refuse	**Disposal** – Mesa County Landfill	Bear-proof waste containers	300 gallons	During completions, containers will be emptied by the contractor weekly. Collection and disposal frequency may fluctuate depending on need.
Production	Proppant (frac sand) Returns	**Recycling and Disposal**- Refer to Attachment C for waste characterization and disposal details.	400 bbl. Tank within Secondary Containment	Over the course of the life of the well pad – around 128 cubic yards.	Sand returns will occur during flowback and production. Sand tank will be emptied monthly; however, occasionally the sand tank may be emptied twice a month
	Produced Solids and Tank Bottoms	**Disposal –** Refer to Attachment C for waste characterization and disposal details	Once removed from production tanks, waste is transferred via hydro vac for immediate hauling to disposal facility.	100 barrels	Annually if needed
	Chemicals - Spent and Unused Non-Hazardous		Manufacturer supplied containers	N/A	As needed disposal.
	Well Workover and Completion Fluids		Store used fluids in tanks and recycled via Laramie water gathering system. Additional fluids are stored in Manufacturer supplied containers.	N/A	Well Workovers are typically conducted every five years. During well workovers operations, disposal occurs weekly.
Spill Response & Remediation	Soil Contaminated with Chemical or Lube Oil	**Disposal –** Refer to Attachment C for waste characterization and disposal details	Poly containers for smaller impacts. Larger contamination stored in metal bins and transferred to dump trucks.	Not Anticipated	As needed. Disposal will be conducted in accordance with 900 series rules and regulations.
	Soil Contaminated with Crude Oil, Condensate or Produced Water				
	Crude Oil/Condensate Collected from Spills				

APPENDIX C

WASTE LIST

Cement – Excess (Not Used Downhole)
Cement – Excess (Returns)
Crude Oil/Condensate Collected from Spills
Domestic Refuse (trash, construction debris, food waste)
Drilling Fluid/Mud
Drilling Mud Solids and Cuttings
Empty Drums and Bulk Containers
Filters - oil and fuel
Lubricating Oils and Hydraulic Oils
Oil Contaminated Debris (oily rags, oil pads, booms, etc.)
Pressurized Cylinders (fire extinguishers, calibration gas, etc.)
Produced Solids and Tank Bottoms
Produced Water
Proppant (Frac Sand)
Septic Waste
Soil Contaminated with Chemical or Lube Oil
Soil Contaminated with Crude Oil, Condensate or Produced Water
Spent Absorbents
Spent Acids and Caustics
Spent Aerosol (degreasers, WD-40, spray paint, lubricants, etc.)
Spent Solvents
Well Workover and Completion Fluids
Cement – Excess (Not Used Downhole)

CEMENT - EXCESS	
WASTE DESCRIPTION	Unused cement used in drilling and well work operations.
CLASSIFICATION	Non-Hazardous
CLASSIFICATION BASIS	Does not meet the requirements for hazardous waste as defined by 40 CFR 261 or UAC R315-5.
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Containerize in leak-proof containers and keep dry. Keep containers closed when not in use and store in designated non-hazardous waste storage areas that reduce the potential for release.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	After cementing, any excess cement will be pumped into tanks and hauled to disposal. A tank will be on location for cement pump flush and washup after operations. Dry excess cement should be returned to vendor.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECYCLING	Return unused dry cement to vendor.

CEMENT – EXCESS (DOWNHOLE RETURNS)	
WASTE DESCRIPTION	Unused cement returns generated during pre-production activities
CLASSIFICATION	Non-Hazardous
CLASSIFICATION BASIS	Does not meet the requirements for hazardous waste as defined by 40 CFR 261 or UAC R315-5.
ECMC REFERENCE	ECMC Rule 905
HANDLING & STORAGE	Containerize in leak-proof containers and keep dry. Keep containers closed when not in use and store in designated non-hazardous waste storage areas that reduce the potential for release.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	After cementing, any excess cement will be pumped into tanks and hauled to disposal at an approved third-party waste disposal facility (Appendix A). A tank will be on location for cement pump flush and washup after operations. Cement returns are E&P Waste and will not be buried/disposed of on location.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.

CRUDE OIL / CONDENSATE COLLECTED FROM SPILLS	
WASTE DESCRIPTION	Crude oil and condensate collected from spills, leaks, and operation upsets.
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53.
ECMC REFERENCE	ECMC Rule 905
HANDLING & STORAGE	If not placed back into production system, containerize in rain-proof and leak-proof containers that are compatible with the material stored therein. Keep

	containers closed when not in use. Store containers in designated non-hazardous waste storage areas that reduce the potential for release.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	If not placed back in production system, dispose of at an approved E&P exempt waste landfill.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECYCLING	Return to production stream for recovery.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
DOMESTIC REFUSE	
WASTE DESCRIPTION	General personnel trash, paper, food waste, etc.
CLASSIFICATION	Municipal/Domestic Solid Waste
CLASSIFICATION BASIS	Does not meet the criteria for hazardous waste as defined by 40 CFR 261 or UAC R315-5 but may be classified as hazardous if mismanaged.
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Do not mix with material that is contaminated or may be hazardous. Place domestic refuse in trash receptacle if not recycled.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved municipal waste landfill.
APPROVED WASTE DISPOSAL FACILITIES	Mesa County Landfill or Greenleaf Environmental Services
RECYCLING	Recycle at an approved recycling facility.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
DRILLING FLUID/MUD	
WASTE DESCRIPTION	Water-based circulating fluid/mud used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure.
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53, but may be classified as Hazardous if mismanaged.
ECMC REFERENCE	ECMC Rule 905
HANDLING & STORAGE	A closed loop system will be used to separate solids from liquid. The majority of drilling fluids are anticipated to be clean and clean drilling fluids will be recycled and used in drilling operations at the next pad location. Any drilling fluids that are deemed to be unusable, will be transported to an approved off-site disposal facility.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved E&P exempt waste landfill or approved subsurface injection facility.

APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.	
RECYCLING	Reuse drilling fluid whenever possible, otherwise recycle at an approved recycling facility.	
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.	
DRILLING CUTTINGS/OILY WASTE		
WASTE DESCRIPTION	Particles and cuttings generated by drilling into the subsurface geological formations including cured cement carried to the surface with the drilling fluid (water based).	
CLASSIFICATION	E&P Exempt	
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53.	
ECMC REFERENCE	ECMC Rule 905	
HANDLING & STORAGE	Store to dry and treated on Location.	
REQUIRED SAMPLING & ANALYSIS FOR CLASSIFICATION	ECMC Table 915-1	
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).	
TRANSPORTATION	Drill cuttings/oily waste will be disposed of at an approved waste disposal facility. Drilling cuttings hauling will require 80 trucks, resulting in 160 truck trips.	
DISPOSAL	Drill Cuttings/Oily waste will be disposed of offsite. Refer to Appendix A for a list of approved waste disposal facilities.	
APPROVED WASTE DISPOSAL FACILITIES	Drill Cuttings/Oily waste will be disposed of offsite. Refer to Appendix A for a list of approved waste disposal facilities.	
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.	
VOLUME	Per Well	Estimated for CCR Pad
	540 Cubic Yards	1,080 Cubic Yards
EMPTY DRUMS AND BULK CONTAINERS		
WASTE DESCRIPTION	Metal and plastic drums and similar, returnable, bulk containers of various sizes, sorted by chemical when possible.	
CLASSIFICATION	Non-Hazardous	
CLASSIFICATION BASIS	Does not meet the criteria for hazardous waste as defined by 40 CFR 261	
ECMC REFERENCE	ECMC Rule 906	
HANDLING & STORAGE	Store empty drums and containers in a designated drum storage area. Ensure that all drums and containers are properly sealed. Effort should be made to empty the container completely before storage. Drums and containers previously containing hazardous and non-hazardous materials are considered empty when there is less than one inch of residue remaining. Drums and containers previously containing acute hazardous materials must be triple rinsed and the rinsate disposed of accordingly. Contact the EHS Dept. for more information.	

LABELING	Label as “Empty”.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Bill of Lading or Non-Hazardous Waste Manifest.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Crush and dispose of at an approved non-hazardous waste landfill.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECYCLING	Return to vendor or recycle at an approved recycling facility. Drums and containers to be recycled must be completely empty of all liquid residue.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
FILTERS – OIL AND FUEL	
WASTE DESCRIPTION	Filter material used in a process unit or E&P equipment which removes solid contaminants from fuel and oil.
CLASSIFICATION	Non-Hazardous
CLASSIFICATION BASIS	Does not meet the criteria for hazardous waste as defined by 40 CFR 261 or UAC R315-5.
ECMC REFERENCE	ECMC Rule 905
HANDLING & STORAGE	Used oil and fuel filters must be “hot drained” to remove all contents, by puncturing a hole in the filter and allowing to drain for 12-24 hours. Containerize used oil or fuel in leak-proof containers and manage according to state and federal guidelines. Mixing of used oil and hazardous waste is prohibited. Once drained, the used filters are required to be containerized within rainproof, leak-proof, closed containers and stored within designated non-hazardous waste storage areas prior to removal from facility. Filters that have not been “hot drained” may be considered hazardous waste.
LABELING	Label with contents.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Bill of Lading or Non-Hazardous Waste Manifest.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved non-hazardous waste landfill.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.

LUBRICATING OILS AND HYDRAULIC OILS	
WASTE DESCRIPTION	Used lubrication or hydraulic oil that originates from diesel and natural gas fired engines and from hydraulic equipment.
CLASSIFICATION	Non-Hazardous
CLASSIFICATION BASIS	Does not meet the criteria for hazardous waste as defined by 40 CFR 261. However, if used oil is not recycled, generator must provide analytical proof that the waste is not hazardous prior to disposal.
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Containerize in rain-proof and leak-proof containers that are compatible with chemicals stored therein. Keep containers closed when not in use. Store containers in designated non-hazardous waste storage areas that reduce the potential for release. Any container 55 gallons or greater must have secondary containment.
LABELING	Container must be labeled as "Used Oil".
REQUIRED SAMPLING & ANALYSIS FOR CLASSIFICATION	If waste oils are recycled, then sampling is not required.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Bill of Lading or Non-Hazardous Waste Manifest.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECYCLING	Recycle at an approved recycling facility.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
OIL CONTAMINATED DEBRIS	
WASTE DESCRIPTION	Oily rags, oil pads and booms generated from equipment maintenance and spill response procedures
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53, but may be classified as Hazardous if mismanaged or contaminated with non-exempt waste.
ECMC REFERENCE	ECMC Rule 905
HANDLING & STORAGE	Waste must be drained of all liquids. Containerize liquids in drums. Deposit oil contaminated debris in rain-proof, leak-proof containers. Keep containers closed when not in use. Store containers in designated non-hazardous waste storage areas that reduce the potential for release.
LABELING	Label with contents.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved E&P exempt waste landfill.

APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
PRESSURIZED CYLINDERS	
WASTE DESCRIPTION	Pressurized cylinders that can no longer be used and are to be decommissioned.
CLASSIFICATION	Non-Hazardous
CLASSIFICATION BASIS	Non- Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53. Does not meet the criteria for hazardous waste as defined by 40 CFR 261
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Completely discharge and depressurize cylinders prior to storage. Containerize and store in designated non-hazardous waste storage areas that reduce the potential for release. Cylinders that are empty of all product can be treated as scrap metal.
LABELING	Label as non-hazardous with contents.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Bill of Lading or Non-Hazardous Waste Manifest.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
RECYCLING	Return waste cylinders to vendor.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
PRODUCED SOLIDS AND TANK BOTTOMS	
WASTE DESCRIPTION	All sediments/sand/sludge /salt removed from the bottoms of tanks or vessels when periodically cleaned out.
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53, but may be classified as Hazardous if mismanaged. If waste material contains TENORM, it must be treated as TENORM waste.
ECMC REFERENCE	ECMC Rule 905
HANDLING & STORAGE	Containerize in rain-proof and leak-proof containers that are compatible with waste stored therein. Keep containers closed when not in use. Store containers in designated non-hazardous waste storage areas that reduce the potential for release.
REQUIRED SAMPLING & ANALYSIS FOR CLASSIFICATION	Check for TENORM before sending to disposal facility.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved E&P exempt waste landfill or landfarm.

APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.

PRODUCED AND FLOWBACK WATER		
WASTE DESCRIPTION	Water collected during the process of extracting and dewatering oil and gas.	
CLASSIFICATION	E&P Exempt	
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53.	
ECMC REFERENCE	ECMC Rule 905	
HANDLING & STORAGE	Containerize in rain-proof and leak proof containers & tanks. Keep containers closed when not in use. Produced water will be transferred to Laramie's Harrison Creek Water Treatment Facility (ECMC Location ID 413056) for treatment.	
LABELING	Label with contents.	
REQUIRED SAMPLING & ANALYSIS FOR CLASSIFICATION	Table 915-1: Benzene, Ethylbenzene, Xylene, Toluene and 1,3,5-trimethylbenzene. Table 437-1. Approved laboratory may not have capabilities to sample for all chemicals listed in Table 437-1.	
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).	
TRANSPORTATION	Will be transported via Laramie's water gathering system to Harrison Creek Water Treatment Facility for treatment. (ECMC Location ID 413056)	
DISPOSAL	Disposed of at Laramie's permitted injection wells: Currier /1-13 (BK1) SWD (UIC Facility ID: 160026), Buzzard Creek Unit 12-4 / (UIC Facility ID: 159355), Ziegal 7-1 SWD (UIC Facility ID: 159172), and Vega Unit 34-13D (UIC Facility ID: 159294).	
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.	
VOLUME	Per Well	Total Per Well Pad (2 Wells)
	110,000 barrels	220,000 barrels

PROPPANT (FRAC SAND)	
WASTE DESCRIPTION	Sand that is used in hydraulic fracturing treatment to prop open the artificially created or enhanced fractures once the treatment is completed.
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53, but may be classified as Hazardous if mismanaged.
HANDLING & STORAGE	Used frac sand will be stored in bermed containment onsite. It will hauled off site for disposal.
LABELING	Label with contents.
REQUIRED SAMPLING & ANALYSIS FOR CLASSIFICATION	None

REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter
DISPOSAL	Can be disposed of at an approved E&P exempt waste landfill. Refer to Attachment A for approved recycling facility location details.
RECYCLING	Unused frac sand will be used for future development or returned to vendor.
RECORDKEEPING	Maintain logs, manifests, and waste documentation at the facility or nearest office for a minimum of 5 years.
VOLUME	148 cubic yards to be disposed.
SEPTIC WASTE	
WASTE DESCRIPTION	Human Waste – portable toilets onsite during pre-production operations when personnel are present onsite full-time.
CLASSIFICATION	Non-Hazardous
CLASSIFICATION BASIS	Non-Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53. Does not meet the criteria for hazardous waste as defined by 40 CFR 261
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Portable John and/or sewage waste will be hauled one to two times a week depending on usage and number of personnel onsite.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	The contractor which provides the portable toilets will dispose of at a certified facility. The portable toilet provider will have a contract established for sewage disposal.
SOIL CONTAMINATED WITH CHEMICAL OR LUBE OIL	
WASTE DESCRIPTION	Chemical or lube oil contaminated soils resulting from spills, leaks and other operational upsets.
CLASSIFICATION	Non-Hazardous (but potentially hazardous depending on contaminants)
CLASSIFICATION BASIS	Non- Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53. May contain components that meet the criteria for hazardous waste as defined by 40 CFR 261
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Drain any excess chemical or lube oil from the soil. Containerize both the liquid and soil within separate rainproof, leak-proof containers. Keep containers closed when not in use and store in designated non-hazardous waste storage areas that reduce the potential for release. If classified as hazardous, dispose of as soon as possible. If you exceed 2204.6 pounds (1000 Kg) per month of hazardous waste, the storage time limit may change.
LABELING	If non-hazardous, label contents. For example, "Non-Hazardous Lube Oil Contaminated Soil". If hazardous, label as "Hazardous Waste". Include contents, generator information and accumulation start date on label.
REQUIRED SAMPLING & ANALYSIS FOR CLASSIFICATION	Soil contaminated with chemicals or lube oil may be hazardous. Analysis is required to confirm waste classification.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	If non-hazardous, use Bill of Lading or Non-Hazardous Waste Manifest. If hazardous, a Uniform Hazardous Waste Manifest is not required, but is highly recommended for Very Small Quantity Generators. Hazardous waste from Small

	Quantity or Large Quantity Hazardous Waste Generators always requires a Uniform Hazardous Waste Manifest.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Non-Hazardous – Dispose of at an approved non-hazardous waste landfill. Hazardous - Dispose of at an approved hazardous waste landfill or at a non-hazardous waste landfill that accepts hazardous waste from a Very Small Quantity Generator.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities. Consult the EHS Department to determine appropriate disposal based on analysis and waste classification determination.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years (indefinitely if hazardous).
SOIL CONTAMINATED WITH CRUDE OIL, CONDENSATE OR PRODUCED WATER	
WASTE DESCRIPTION	Non-Refined Oil, condensate, or produced water contaminated soils resulting from spills, leaks or operational upsets.
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53, but may be classified as Hazardous if mismanaged.
ECMC REFERENCE	ECMC Rule 905
HANDLING & STORAGE	Drain any excess oil or produced water from the soil. Containerize both the liquid and soil within separate rainproof, leak-proof containers. Keep containers closed when not in use and store in designated non-hazardous waste storage areas that reduce the potential for release.
LABELING	Label with contents.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved E&P exempt waste landfill or land farm.
APPROVED DISPOSAL VENDORS	Refer to Appendix A for a list of approved waste disposal facilities.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
SPENT ABSORBENTS	
WASTE DESCRIPTION	Spent absorbents from dehydration units, sweetening units, hydrocarbon removal processes and used in removing impurities from process fluids.
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53, but may be classified as hazardous if mismanaged.
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Waste intended for recycling or landfill must be drained of all liquids and dried. Containerize liquids and absorbent in separate rain-proof, and leak proof containers. Keep containers closed when not in use. Store containers in designated non-hazardous waste storage areas that reduce the potential for release.
LABELING	Label with contents.

REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved E&P exempt waste landfill.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
SPENT ACIDS AND CAUSTICS	
WASTE DESCRIPTION	Acid or caustic that has been used for well workover and stimulation. May contain surfactants, emulsifiers, solvents, and/or dispersant.
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53, but may be classified as hazardous if mismanaged.
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Containerize spent acids in rain-proof and leak-proof containers that are compatible with corrosive materials. Keep containers closed when not in use. Store containers in designated non-hazardous waste storage areas that reduce the potential for release. If commingling with produced water, store in produced water tanks.
LABELING	Label with contents.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	If shipping to 3rd party disposal, use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved E&P exempt waste landfill.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECYCLING	Recycle at an approved recycling facility.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years.
SPENT AEROSOL CANS	
WASTE DESCRIPTION	Aerosol cans containing lubricants, degreasers, spray paint, etc.
CLASSIFICATION	Non-Hazardous if can is "RCRA empty" (See Classification Basis) of product. Hazardous if can is not "RCRA empty" and product can no longer be used.
CLASSIFICATION BASIS	Can/container is RCRA empty if all product has been removed using practices commonly employed (spraying) and residue left in can is <1 inch or <3% of original product weight.
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Containerize spent aerosol cans that are classified as hazardous waste in rain-proof and leak-proof containers that are compatible with the chemicals stored therein. Keep containers closed when not in use. If managed as hazardous waste, store cans for no more than 180 days. Aerosol cans that are RCRA empty can be treated as municipal waste and placed in trash receptacles. Contact EHS Department for assistance.

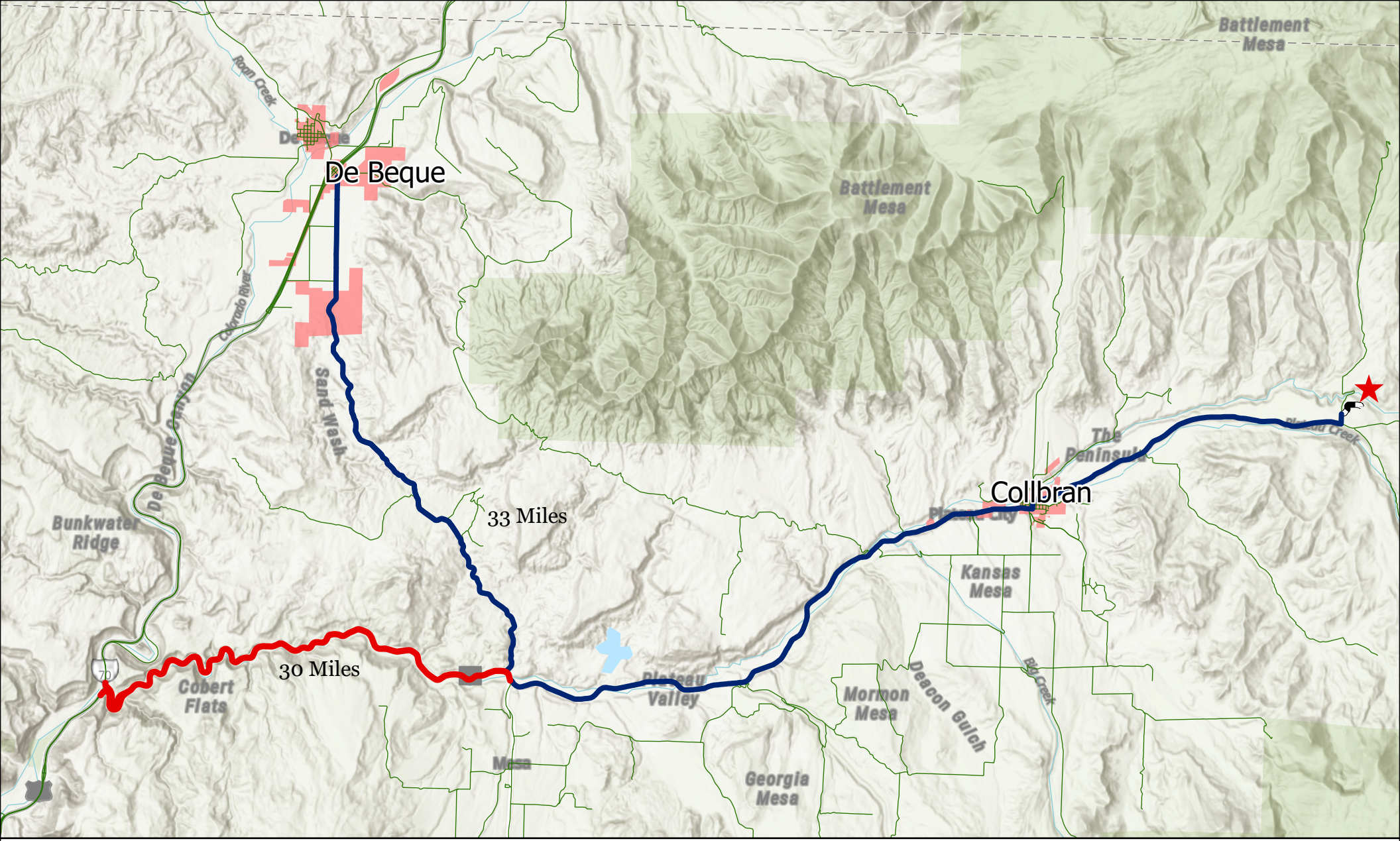
LABELING	The accumulation start date must also be recorded, either on the container or in written or electronic records. If non-hazardous, labeling is typically not required.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Waste aerosol cans that are disposed of as non-hazardous typically need no manifests. If disposed of a hazardous waste, a Uniform Hazardous Waste Manifest is not required, but is highly recommended for Very Small Quantity Generators. Hazardous waste from Small Quantity or Large Quantity Hazardous Waste Generators always requires a Uniform Hazardous Waste Manifest.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	If hazardous, dispose of at an approved hazardous waste landfill. Confirm that landfill will accept waste aerosol cans. If RCRA empty, dispose of cans at approved non-hazardous waste landfill.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five (5) years (indefinitely if hazardous).
SPENT SOLVENTS	
WASTE DESCRIPTION	Solvents used for cleaning/maintenance including paint thinners, varsol, degreasers, methyl ethyl ketone (MEK), toluene, xylene, etc.
CLASSIFICATION	Hazardous
CLASSIFICATION BASIS	Mets the criteria for hazardous waste as defined by 40 CFR 261
ECMC REFERENCE	ECMC Rule 906
HANDLING & STORAGE	Containerize in rainproof, leak-proof containers that are compatible with the solvents contained therein. Keep containers closed when not in use and store in designated hazardous waste storage areas that reduce the potential for release. Hazardous waste should be disposed of as soon as possible. If you exceed 2204.6 pounds (1000 Kg) per month of hazardous waste, the storage time limit may change. Contact EHS Department for assistance.
LABELING	Label as “Hazardous Waste”. Include contents (type of solvent), generator information and accumulation start date on label.
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	If non-hazardous, use Bill of Lading or Non-Hazardous Waste Manifest. If hazardous, a Uniform Hazardous Waste Manifest is not required, but is highly recommended for Very Small Quantity Generators. Hazardous waste from Small Quantity or Large Quantity Hazardous Waste Generators always requires a Uniform Hazardous Waste Manifest.
TRANSPORTATION	Waste must be transported by an authorized and certified transporter.
DISPOSAL	Dispose of at an approved hazardous waste landfill or at a non-hazardous waste landfill that accepts hazardous waste from a Very Small Quantity Generator.
APPROVED WASTE DISPOSAL FACILITIES	Refer to Appendix A for a list of approved waste disposal facilities.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office indefinitely.
WELL WORKOVER AND COMPLETION FLUIDS	
WASTE DESCRIPTION	Wellwork fluids including completion, workover fluids
CLASSIFICATION	E&P Exempt
CLASSIFICATION BASIS	Exempt for oil and gas production under EPA Regulatory Determination Federal Register Vol. 58, No 53, but may be classified as Hazardous if unused and contains hazardous components.

CCR 0994-23-02 Well Pad
Waste Management Plan
ECMC Rule 304.c.(11)

ECMC REFERENCE	ECMC Rule 905
HANDLING & STORAGE	Store used fluids in tanks. Produced water will be transferred to Laramie's Harrison Creek Water Treatment Facility (ECMC Location ID 413056) for treatment.
LABELING	Label with contents. For example, "Produced water"
REQUIRED LOGS, MANIFESTS, NOTIFICATIONS	Use the state specified method of shipment for E&P Waste (required manifest or standard bill of lading).
TRANSPORTATION	Waste must be transported by an authorized and certified transporter or via pipeline
DISPOSAL	Disposed of at Laramie's permitted injection wells: Currier /1-13 (BK1) SWD (UIC Facility ID: 160026) and Buzzard Creek Unit 12-4 / (UIC Facility ID: 159355).
RECYCLING	Flowback from completions will be treated at an ECMC approved Harrison Creek Water Treatment Facility (ECMC Location ID 413056) to be recycled or re-used for additional stimulations at other pads. MSDS sheets will be maintained for any additives used in stimulation. Tanks will be labeled in accordance with ECMC regulations.
RECORDKEEPING	Maintain all logs, manifests and waste documentation at the facility or nearest office for a minimum of five years.

APPENDIX D

Haul Route Map



Site Location

Public Roads

CCR 0994 23-02 Access Road 2,542 ft

Route 1 - 30 Miles

Route 2 - 33 Miles

N

0 2.5 5 Miles

Haul Route Map

CCR 0994-23-02 Pad
NWNE, SECTION 23,
T9S, R94W, 6th P.M.
MESA COUNTY, CO